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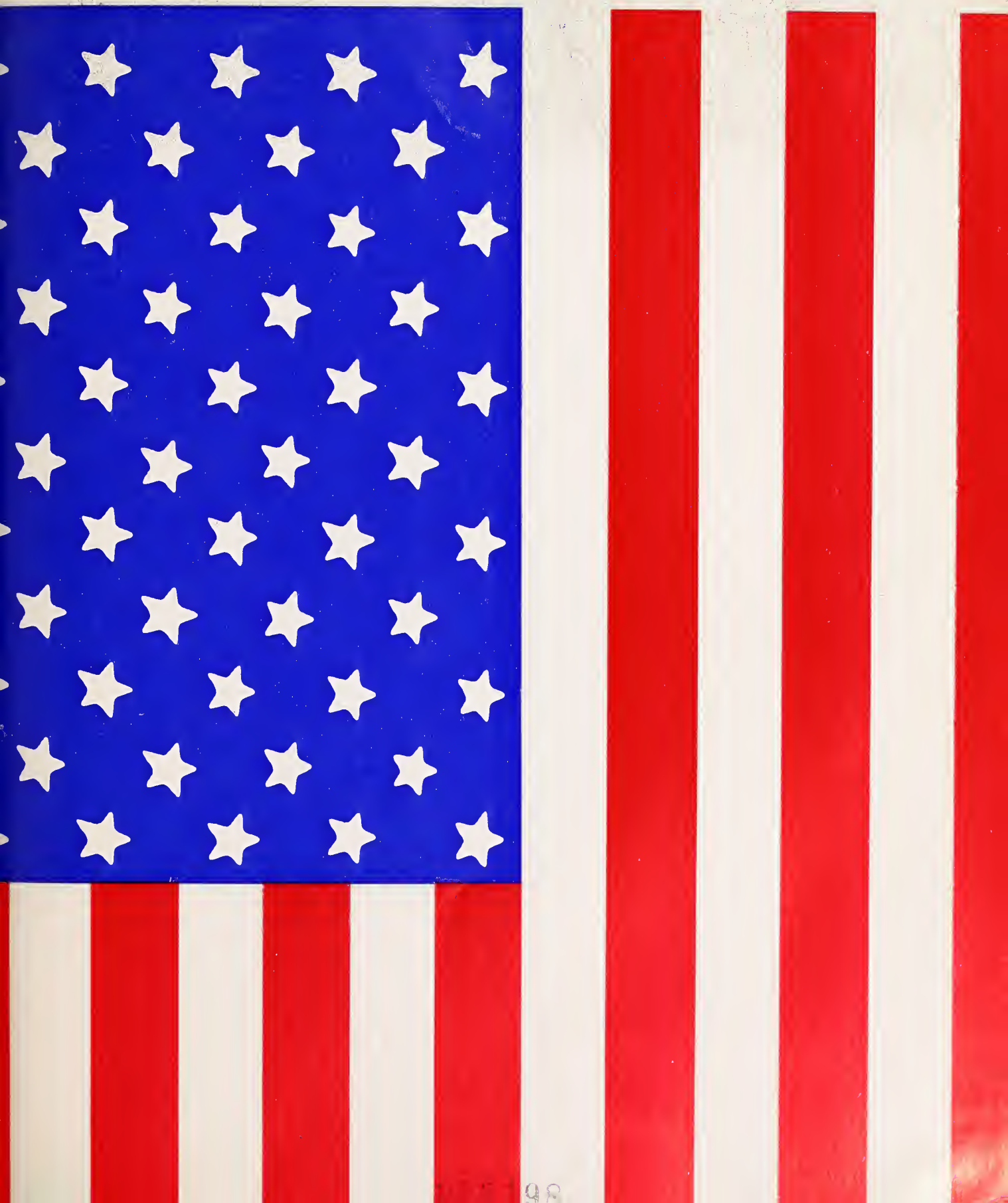

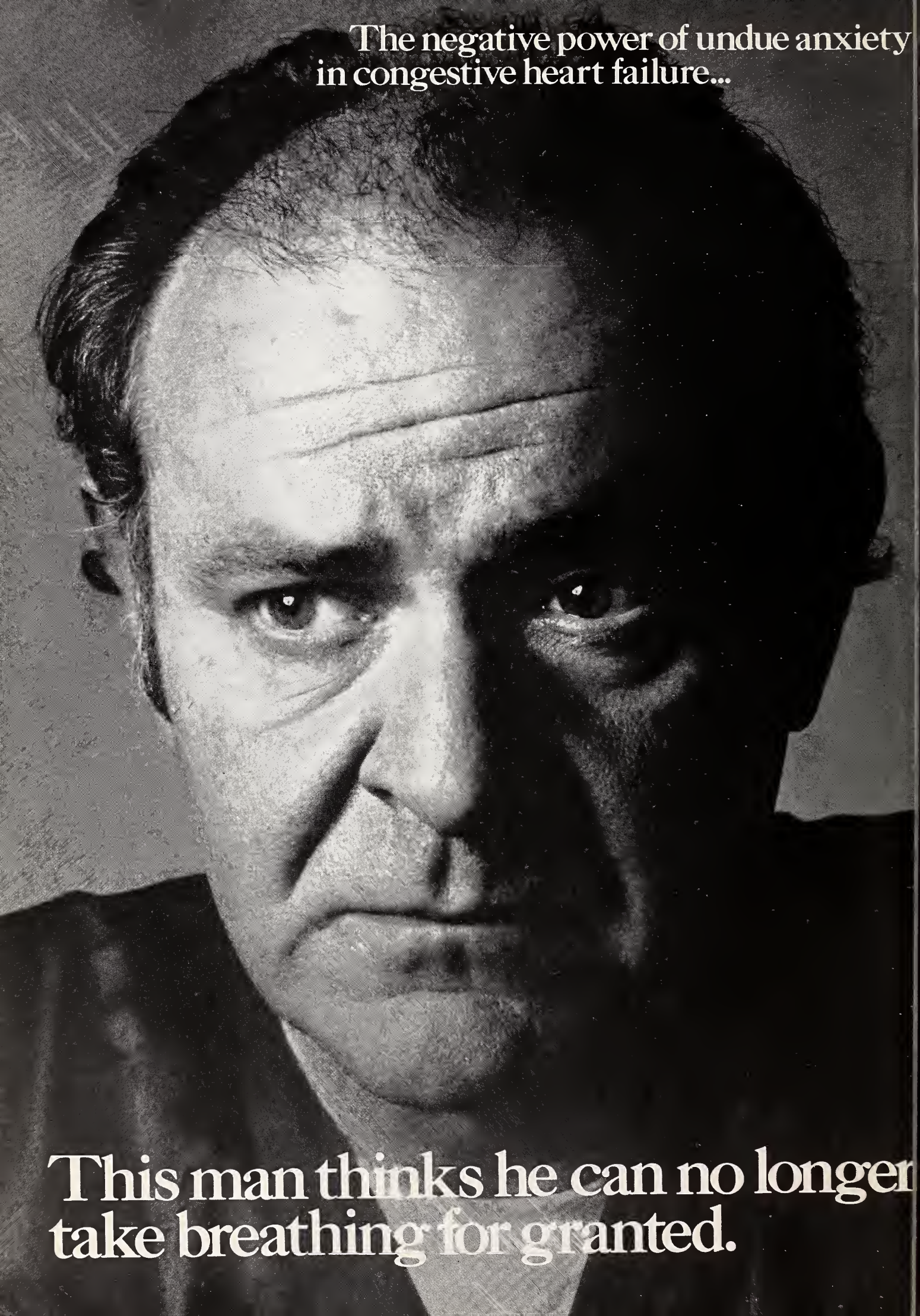
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INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

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Contents

Cover

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Early diagnosis and effective management is stressed in this condition affecting 200 infants in Georgia each year.

The Recognition and Management of Congestive Heart Failure in Infancy

JOHN STEWART, M.D. *and* WILLIAM B. STRONG, M.D., F.A.A.P., F.A.C.C., *Augusta*

Is CONGESTIVE HEART FAILURE (CHF) in infancy common enough for the family practitioner or pediatrician to familiarize himself with its recognition and management? We believe this question should be answered with an emphatic YES! The incidence of congenital heart disease is approximately 1 per cent of live births in the United States—about 20 per cent of these patients will experience congestive heart failure during infancy. Therefore, approximately 6,000 to 8,000 infants each year will develop heart failure.*

Two decades ago, the treatment of an infant with congestive heart failure due to a congenital heart malformation had little more to offer than prolonging a progressively fatal course. Today, almost all of the common forms of congenital heart disease are amenable to surgical correction or palliation. This means that early recognition and vigorous medical management offers the patient not just a few hours or days, but possibly a full, healthy productive life.

The purpose of this paper is to review the diagnosis and management of congestive heart failure in the first year of life. The older child with congestive heart failure, especially as related to acute or chronic rheumatic heart disease will not be discussed.

Definition

Congestive heart failure can be defined as the condition in which the heart is unable to pump enough blood to meet the body's requirement. Thus, the right ventricle fails when it cannot pump all of the blood it receives to the lungs; this results in an increase in systemic venous pressure, and peripheral edema. The left ventricle fails when it cannot pump all of the blood it receives to the systemic circulation causing an increase in pulmonary venous pressure and consequent pulmonary edema.

The leading cause of congestive heart failure in infancy is congenital heart disease. Other less frequent causes are paroxysmal supraventricular tachycardia, myocarditis, and endocardial fibroelastosis. The most frequent congenital heart lesions causing CHF in infancy are: transposition of the great arteries, hypoplastic left ventricle complex, coarctation of the aorta, ventricular septal defect, and patent ductus arteriosus.

Diagnosis

The signs and symptoms of heart failure in infancy are less specific than those observed in older children and adults.

The history may provide valuable clues suggesting early heart failure. The mother may relate that the child *tires easily during feeding;* she may relate that the baby is only able to take one or two ounces of formula before fatiguing. Since an infant's most significant physical activity is eating, this symptom is comparable to easy fatiguability in the adult. *Rapid breathing* may also be described not only during feeding but also during sleep. These signs are similar to dyspnea on exertion and orthopnea seen in the older patient. A sign peculiar to pediatric patients, especially infants, is *excessive sweating* especially about the scalp, even in a cool environment. This is usually most marked during feedings, but it may be continuous, its etiology is unknown. Anorexia, vomit-

* *In Georgia, approximately 200 infants each year will develop congestive heart failure. This figure based on Georgia birth rate × incidence × 20%.*

ing and restlessness are other nonspecific signs of congestive heart failure, the first two probably caused by splanchnic congestion.

On examination, *tachypnea* is a sign often seen in infants with lesions associated with high pulmonary blood flow, even though they may not be in heart failure. Tachypnea, however, may be the first presenting sign in left ventricular failure. It may be present by itself or be associated with some degree of respiratory distress such as grunting respirations or retractions. *Wheezing* is a relatively frequent finding in CHF in infancy, and it is probably secondary to peribronchial edema which reduces the diameter of the small bronchi significantly and causes expiratory obstruction and hence the wheeze. The lungs are quite "stiff" because of congestion and the diaphragms become depressed. This produces an interesting sign which may be described as an inspiratory indrawing of the thorax at the level of the ninth rib and a flaring of the ribs below this level. This produces a sharp line of demarcation known as the "violin" sign.

Tachycardia (a heart rate of 140-180 per minute) is common in CHF during the first months of life, rarely exceeding 200 per minute. In paroxysmal atrial tachycardia, the rate generally is in excess of 240 per minute.

Other than a *gallop cadence* arising from the decompensated ventricle, there are no specific auscultatory findings associated with heart failure. The murmurs and sounds associated with the specific underlying malformation may or may not be heard and occasionally they are not apparent until the infant's hemodynamics are compensated with adequate treatment.

Edema associated with CHF in infancy is not as apparent as that seen in the older child and adults. Its distribution is also different. Pedal edema and ascites are rarely found in infants whereas periorbital and frontal edema is frequently observed. This is accounted for by the fact that infants spend the majority of their time sleeping on their abdomen and, hence, the face is the dependent area for fluid accumulation.

Because of the short thick neck of the infant, evaluation of increased systemic venous pressure by examination of the neck veins is of little or no value. Peripheral veins which are more easily evaluated such as the scalp veins may be used to detect increased systemic venous pressure; however, in the infant, increased systemic venous pressure is best evaluated by examining the liver.

Hepatic enlargement is very common in right ventricular failure. The liver is not only found to be extended well below the costal margin, but more importantly, the left lobe of the liver is also palpable. This last point will be helpful in differentiating between right sided failure and pulmonary conditions producing air-trapping and depressed diaphragms such as bronchiolitis or asthma. With hepatic enlargement, there is concomitant increases in portal and mesenteric venous pressures resulting in splenomegaly and edema of the intestine. This latter fact probably accounts for the high incidence of associated feeding problems, especially vomiting.

Treatment

The treatment of heart failure in infancy, as in adults, has two major objectives: decrease the work load of the failing ventricle and provide exogenous support for the failing myocardium. The first objective can be partially achieved with rest in the older infant, decreasing the tissue requirements for oxygen. Digitalis, diuretics, oxygen, and other palliative measures are the exogenous supports.

We subscribe to the following method of management of the infant with congestive heart failure.

Oxygen: Oxygen therapy in the initial period helps lessen the labored respirations. It should be humidified to prevent the drying effect of oxygen. An oxygen concentration of 30-40 per cent in the incubator (4-5 L/min.) or a tent (8-10 L/min.) is generally sufficient.

Rest and Feeding: Allowing the infant to rest in an infant seat at 45 degrees is helpful. In the infant who is dyspneic, feeding should be discontinued until digitalization has been completed. Fluids given at 60 cc/kg. may be used until feeding is resumed. The rationale for this is to prevent aspiration and allow for more rest. The infant who screams to be fed usually can be readily pacified with a nipple moistened with sugar water. Infant formulas are relatively low in salt content (usually 11 mEq/L). If excessive fluid accumulation proves to be troublesome, a low salt infant milk such as Similac PM 60/40 or SMA 26 can be used.

Digitalis: There are several forms of digitalis available, all of which have essentially the same mechanisms of action and differ mainly in the rapidity of onset and duration of action. The preparation most convenient to the physician taking care of children is digoxin. This drug has the benefit of being available in oral and parenteral preparations as well as having rapid onset of action, ease of administration and rapid excretion. We recommend that all infants be initially digitalized parenterally. When congestive heart failure is extremely severe, digitalis should be given intravenously (IV), since absorption from intramuscular (IM) sites may be delayed secondary to poor circulation. In moderate and mild congestive

heart failure, IM digoxin is effective. Therefore, only one preparation need to be known. A digitalizing schedule that has been found to be effective is as follows: one-half the digitalizing dose given immediately, followed by one-fourth in six hours. After a rhythm strip has been obtained to insure the absence of digitalis toxicity, the final one-fourth may be given six hours later. If necessary, IV digoxin may be given much more rapidly since its peak action occurs in 1-2 hours. Because of reported poor and irregular intestinal absorption, we do not recommend oral digitalization. Table I presents an effective digoxin dose schedule.

TABLE I
DIGITALIZATION WITH DIGOXIN

Age	Oral Total Dose (mg/kg)	Parenteral Intramuscular or Intravenous
Newborn	0.04	
1 mo.-2 yrs.	0.08	Reduce by ¼ to ⅓ of
2 yrs. plus	0.04	the total oral dose

Twelve hours following the completion of digitalization, maintenance digoxin should be instituted. Daily maintenance doses are ¼ of the total digitalizing dose and are usually administered in two equally divided doses 12 hours apart.

Patients should be evaluated for signs of digitalis toxicity before each dose of the digoxin is administered. During initial digitalization, this should be done electrocardiographically. Signs of digitalis toxicity seen in infants are significant prolongation of the PR interval (greater than 0.16 seconds, or a prolongation greater than 0.04 compared to the predigitalis PR interval), and premature ventricular contractions. Any arrhythmia that begins during digitalis therapy should be considered due to the digitalis. Nausea and vomiting are rarely due to digoxin toxicity in the infant, and in general, they are indicative of inadequate digitalis levels.

Diuretics: Digitalis and rest may be all that is required to eliminate excessive fluid in the milder forms of failure. However, many infants will require a diuretic. The need for diuretics is best estimated clinically using daily weights since urinary output values in infants are notoriously inaccurate. Two diuretics known to be very effective in infants with CHF are the mercurial diuretics and ethacrynic acid. In infants, a dose of 0.2 cc. of mercuhydrin (IM) has been found to be very effective. The dose of ethacrynic acid is 1 mg. per kg. IV. In the majority of cases once adequately compensated with digitalis, infants can maintain adequate fluid balance without the use of diuretics.

Morphine: In cases in which restlessness is a major problem, morphine given IM in a dose of 0.1 mg/kg may prove to be very helpful.

Special studies are indicated in all infants with CHF and undiagnosed malformations. Once the infant has been stabilized, or earlier if necessary, the infant should be transported to a center where special studies can be performed to determine not only the anatomical lesion but also to differentiate those lesions requiring immediate surgical intervention from those that can be best managed medically in infancy. Cardiac catheterization can also be a lifesaving procedure in those lesions in which the creation or enlargement of an intra-atrial communication is required (transposition of the great arteries) to allow adequate shunting of blood for survival.

In conclusion, we can say that approximately 7,000 infants born in the United States each year (200 in Georgia) develop congestive heart failure. The greatest majority of these have CHF during the first 6 months of life. Knowledge of how this condition presents in infancy as compared to later in life is essential for physicians who care for infants. The prompt recognition and institution of therapy can account for a large percentage of these infants reaching special centers where emergency procedures can be lifesaving.

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REFERENCES

1. Braunwald, E.: The sympathetic nervous system in heart failure; *Hospital Practice*, Dec.: 31-39, 1970.
2. Roudolph, A. M.: Cardiac failure in children: A hemodynamic overview; *Hospital Practice*, July: 44-55, 1970.
3. Shaffer, A. B. and Katz, L. N.: Hemodynamic alterations in congestive heart failure: *NEJM* 276:853-857, 1967.
4. Zelts, R. F. and Mason, D. T.: Compensatory mechanisms in congestive heart failure—the role of the peripheral resistance vessels; *NEJM* 282:962-964, 1970.

This new method of storing sperm obviates the need for cumbersome ampule sealing equipment.

Using Paillettes to Simplify Freezing Sperm for Artificial Insemination

ARMAND M. KAROW, JR., PH.D.* *and* EDWIN C. JUNGCK, PH.D., M.D.,† *Augusta*

ARTIFICIAL INSEMINATION with frozen semen is a proven clinical procedure.[1, 2, 3] More than 500 people alive today were conceived with frozen semen; there have been no birth defects attributed in any way to this semen.

Freezing of semen for AIH (artificial insemination, husband) is of course indicated when voluntary vasectomy is contemplated. Closely related are clinical procedures such as surgery or radiation which will sterilize the husband and endanger the genetic resources of progeny. Another possible indication is a hazardous occupation such as military combat or handling radioactive material. Recently we have frozen semen for an unmarried patient requiring a prostectomy but who did not wish to preclude future fatherhood. An attractive potential, although so far largely unsuccessful in producing progeny, is to store frozen semen from oligospermic patients, then later concentrating the thawed sperm by centrifugation prior to AIH. Frozen semen for AID (artificial insemination, donor) can permit a convenient and simple means of supplying semen from donors who possess desired physical or mental characteristics.

The use of frozen semen in an office practice has previously been complicated by the requirement of maintaining a liquid nitrogen storage facility in the clinic. This need is now obviated by the convenience of modern packing and transportation so that frozen semen can be shipped to a centralized bank. Also in the past it was necessary to use glass ampules as semen containers for freeze-storage. These ampules had to be sealed with an oxygen-acetylene torch; the bottles of gas were cumbersome if not dangerous. If the glass seal was not perfect, the ampules would explode upon thawing. An automatic sealing apparatus was relatively expensive. All these problems are alleviated by the use of 0.5 ml plastic paillettes (pronounced: pay-let) as shown in Figure 1.

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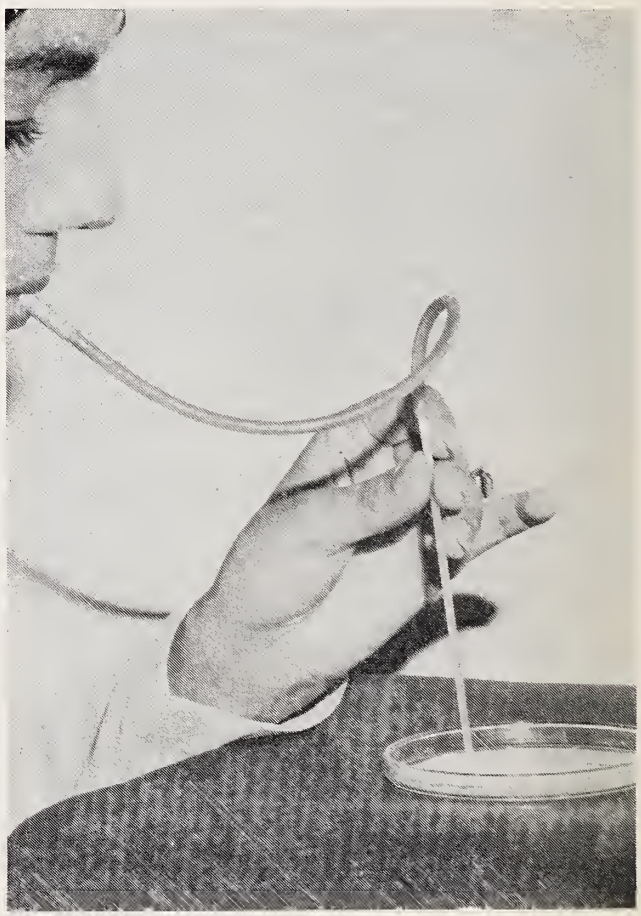

FIGURE 1

A paillette filled with semen prior to freezing. The technician is pressing the paillette into the powdered sealant.

Methods

Collected semen is allowed to liquify. The cells are counted and observed for motility and abnormal forms. The minimal acceptable count is 20 million sperm per ml.

In order for the sperm to survive freezing, glycerol must be added to the semen. The semen may be either diluted with an equal volume of egg yolk diluent (Table 1) as done by S. J. Behrman, M.D.[1] in Ann Arbor or diluted directly with a volume of glycerol equal to one-tenth the semen volume as

TABLE I

EGG YOLK DILUENT

Solution A: Mix 2 parts of a 5% glucose solution and 3 parts of a 2.9% solium citrate solution.

Diluted:

Egg Yolk	**20%**
Glycerol	**14%**
Solution A	**66%**

Add 1,000 units of penicillin per ml of diluent and 0.5 mg streptomycin per ml of diluent. Warm the diluent to 56°C for 30 minutes, cool, and adjust pH to 7.3 with sodium bicarbonate. It is best to keep the diluent no longer than 1 week.

done by E. T. Tyler, M.D.[2] in Los Angeles. We have used both methods, observing a somewhat better post-thaw recovery with the yolk diluent. With either method, the addition should be done gradually over two or three minutes and the semen should be constantly swirled to assure adequate mixing and to prevent injury from osmotic effects of glycerol.

Semen may then be aspirated into plastic paillettes as shown in Figure 1. The paillettes are polyvinylchloride tubes, plugged at one end with cotton and a moisture sensitive sealant. The paillette is filled with semen by sucking on the plugged end through an attached rubber tube such as those used with a blood-diluting pipette. The open end is then sealed simply by pressing the end into a small amount of sealant powder.

The paillettes are then placed in a refrigerator at 4°C for 30 minute. This allows the semen to cool slowly, preventing thermal shock. During this period there is further equilibration of sperm with glycerol.

Freezing is accomplished by removing the paillettes from the refrigerator and suspending them above Dry Ice-acetone or liquid nitrogen so that the semen temperature drops 1 or 2°C in liquid nitrogen, a temperature at which sperm remain viable for 10 years or longer. Once in liquid nitrogen the semen paillettes are easily transported between clinics or to a central bank.

Insemination

For insemination a paillette is thawed by dropping it directly from liquid nitrogen into a 40°C water bath. The sealed end is clipped off with scissors and the paillette is inserted into a disposable injector (Figure 2). The semen may be expelled over the cervical os or directly into the cervical canal. One paillette contains sufficient semen for fertilization.

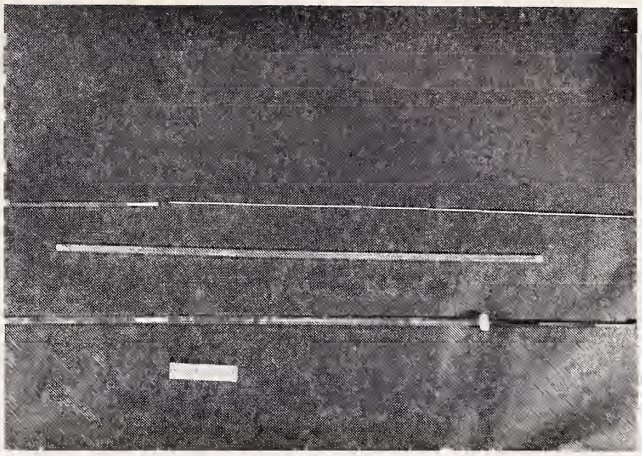

FIGURE 2

The assembly of the paillette-semen injector device. The paillette and plunger seen in the top row are inserted into the plastic barrel (second row) of the injector to give the complete assembly (bottom) for use in artificial insemination. This assembly, very inexpensive, is discarded after a single use.

Prior to insemination it is of course advisable to determine whether the patient is at the time of ovulation and whether the thawed semen quality is good. After thawing, 50 per cent of the sperm should be motile; some technicians have reported 70 per cent post-thaw sperm motility under carefully controlled conditions. Thawed sperm from some men may appear to have good motility yet still lack fertilizing capacity. The reasons for this are unknown, perhaps related to subtile biological differences or to unappreciated variations in technique.

Medical College of Georgia

REFERENCES

1. Behrman, S. J. and Ackerman, D. R.: Freeze preservation of human sperm; *Am. J. Obst. Gynec.* 103:654, 1969.
2. Sherman, J. K.: Research on frozen human semen; *Fert. Steril.* 15:485, 1964.
3. Tyler, E. T.: Twenty years' clinical experience with frozen semen; *J. Reprod. Med.*, in press.

This small tumor is very painful to deep palpation, is benign and is best treated by complete excision.

Subungual Glomus Tumor: A Cause of Pain Beneath the Finger Nail

WAYNE CHRIS SHEILS, JAMES L. BECTON, M.D., *and* JOE D. CHRISTIAN, JR., M.D., *Augusta*

IT IS THE PURPOSE of this paper to alert the practicing physician to the glomus tumor as being one cause of exquisite pain beneath the finger nail.

The first good description of what is regarded as a glomus tumor was made in the *Edinburgh Medical Journal* by William Wood, who described a small, benign, bluish, "painful subcutaneous tubercle." This was followed in 1878 by Lolaczek's description of a painful subungual subcutaneous tubercle. In the latter part of the 19th century the tumor was classified as an angiosarcoma. In 1920, Barre, a French neurologist, described a bluish subungual tumor associated with severe paroxysms of pain radiating to the neck and at times coupled with a Horner's syndrome. In 1924, Pierre Masson, a pathologist, gave the first accurate histologic description of the tumor, recognizing that it originated from the normal neuromyoarterial glomus. Masson later reported the tumor appearing in parts of the body other than the hand.

Case Report

Mrs. S., a 28-year-old white female, noticed a tender place in the distal end of her left thumb approximately 8 years prior to hospitalization. There was no history of trauma. Since that time the pain became progressively more intense, with the area of involvement becoming exquisitely tender to palpation. A red dot was noted on the lateral aspect under the nail of the left thumb over which the patient was sensitive. The margin of the nail itself was irregular with some ridging and retraction. Skin temperature, sweat pattern, and x-rays were normal.

Under block anesthesia, an incision was made at the nail base. The lateral half of the nail was excised and a 2 mm. by 3 mm. light pink mass was removed with a margin of normal tissue and the underlying bone was curetted. The wound was closed. Microscopically the lesion was very vascular and composed of well-demarcated plexiform masses of epithelial cells separated by islands of connective tissue. Eight months postoperatively the patient was asymptomatic.

Clinical Aspects

The presence of a painful, bluish tubercle, 3 to 5 mm. in diameter should alert the physician to the diagnosis of glomus tumor. Horner's syndrome with increased heat and sweating of the finger may be present or pain may occasionally be present before the tumor is visible and cold may trigger it. The bluish tinge of the tumor is seen frequently under the translucent nail and transillumination of the phalanx can aid in demonstrating a small mass.

A subungual glomus tumor may cause pressure atrophy secondary to the pulsations of the tumor in a manner similar to pressure atrophy seen in vertebral bodies involved in an aortic aneurysm. A small, crater-like depression of the distal phalanx which is usually smooth and sharply defined may be present radiologically.

The multiple findings above are not found in all patients. Shugart and associates were able to detect bluish discoloration under the nail in 11 of 20 patients, nail ridging in three of 20 patients, and there were positive radiologic findings in three of 14 patients. All patients complained of pain. The pain was so severe in some that they refused to allow palpation.

Differential

In most patients, diagnosis of glomus tumor is fairly definite. In questionable cases other things should be considered as illustrated in Phalen's excellent description of differential diagnosis. Subungual hematoma correlates well with a history of trauma followed by subungual discoloration and pain. Time, however, establishes this diagnosis by resolution of the hematoma. Neurofibroma may be considered, though it is not known for producing paroxysms of

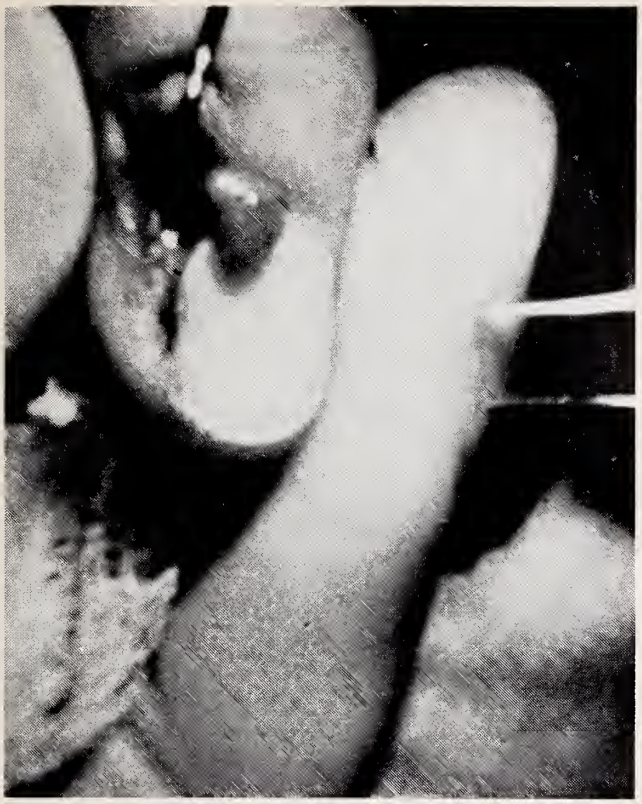

FIGURE 1

A 3 × 4 mm. red firm tumor found beneath the margin of the thumb nail.

pain. Subungual melanoma may also be considered, but it too produces no paroxysmal pain. Subungual exostosis, though exquisitely painful, is identified radiologically. Angiomas mimic glomus tumors, but provoke little pain on palpation. Osteoid osteoma may be considered in that it produces localized pain but is relieved with aspirin and x-rays are characteristic of this lesion. Other conditions which have been considered, according to Robbins, include sebaceous cyst, inclusion cyst, dermoid cyst, subungual carcinoma and subungual enchodroma.

Distribution and Incidence

CHILDREN—In 1961 Kahout and Stout published a series of 731 patients through the age of 15 years old with glomus tumors. The tumors were widely distributed in location, including subcutaneous tissue, ligaments, joint capsules, and within the bone of the distal phalanx. Of these, 26.3 per cent were multiple, 12 per cent infiltrating, 10 per cent congenital, and 23 per cent involved subungual tumors with a 7 to 1 predominance of the latter being seen in female patients.

ADULTS—In a series of 686 adults, according to Kahout and Stout, there were two striking differences of glomus tumors as opposed to children with respect to incidence and distribution; there were fewer cases of adult multiple tumors (2.3 percent) and only 0.3 percent of all adult tumors show an infiltrative growth. The 7:1 female-male predominance of subungual tumors prevailed.

Pathology

According to Bloom and Fawcett, the glomus is a highly organized anastomosis between arteries and veins and is found in the nailbed, pads of the fingers and toes, and in the ears. The structure is composed of an afferent arteriole, the Sucquet-Hoyer shunt, and a collecting venule. The arteriole enters the tissue of the glomus, loses its elastic membrane for a heavy epithelioid muscle coat and narrow lumen, then empties into a thin-walled vein with a wide lumen. The epithelioid muscle coat of the anastomosis, richly innervated by sympathetic and myelinated nerves, constitutes the Sucquet-Hoyer shunt. After the shunt empties into the collecting vein, the collecting vein in turn empties into a periglomic vein which then joins to ordinary veins.

The functions of the glomus, according to Bloom and Phalen and associates, are to regulate the flow of blood in the extremities and to regulate temperature and conserve heat.

The histology of the tumor itself, according to Phalen, indicated that *tumor* is a misnomer in that the glomus tumor is probably not a true neoplasm but a hypertrophied glomus. Sections reveal masses of blood vessels lined with a single layer of endothelium. This in turn is surrounded by fibrous tissue and "epithelioid" or glomus cells. In 1942 Murray and Stout identified these glomus cells as pericytes of Zimmerman, cells normally found wherever there are capillaries, a fact thought to explain why glomus tumors are found in areas of the body other than where the glomus is normally found.

Murray and Stout conclude, along with Robbins, that there are no known cases involving a malignant glomus tumor even though local infiltration and recurrence after incomplete excision has been seen.

Etiology as yet appears unknown. Though there are reported cases of subungual glomus tumors in patients, each with a positive history of trauma in the area of the tumor (in the series of Shugart 16 percent of those reported had such a history) there are many cases with no such history, leaving trauma as a questionable cause.

Treatment

Kahout and Stout frankly state that surgical excision is the treatment of choice and is curative when excision is complete; recurrence is presumptive of an incomplete excision. Needless to say, Kahout and Stout are in universal agreement with all other sources consulted.

Summary

The etiology of pain in the hand is often not well understood by the practicing physician. The cause of pain beneath the nail can sometimes be a glomus tumor. This small reddish-blue tumor is exquisitely painful to deep palpation, is benign, and is best treated by complete excision.

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BIBLIOGRAPHY

1. Apfelberg, D. B. and Teasely, J. L.: Unusual locations and manifestations of glomus tumors; *Am. J. Surg.* 116:62-64, 1968.
2. Bloom, W. and Fawcett, D. W.: *A Textbook of Histology*. Ninth Ed. P. 378, 1968.
3. Kahout, E. and Stout, A. P.: The glomus tumor in children; *Cancer* 14:555, 1961.
4. Murray, M. R. and Stout, A. P.: The glomus tumor, investigation of its distributions and behavior, and the identity of its "epithelioid" cell; *Am. J. Path.* 18:183, 1942.
5. Phalen, G. S. and Mouroulis, D. I.: The diagnosis and treatment of glomus tumor; *Cleveland Clin. Quart.* 33:73-79, 1966.
6. Robbins, H.: Subungual glomus tumor with pressure atrophy of the terminal phalanx; *Bull. Hosp. Joint Dis.* 26-28:77-83, 1965-66.
7. Rypins, E. L.: The roentgenologic aspects of subungual glomus tumor; *Am. J. Roent. and Rad. Ther.* 46:667-672, 1942.
8. Shugart, R. R., Soule, E. H. and Johnson, E. W., Jr.: Glomus tumor; *Surg., Gynec. Obstet.* 117:334, 1963.

A "Dense" Density in the Pelvis

WILLIAM WHITAKER, M.D., *and* WILLIAM WEDDINGTON, M.D., *Atlanta**

DR. WILLIAM WHITAKER: The patient for presentation is a 37-year-old female who presented with right upper quadrant pain and distention which was sudden in onset. The patient complained of nausea and vomiting since the onset of the pain. There was mild leukocystosis, and the temperature was 100.0. A film of the abdomen was obtained. Dr. Weddington, would you comment on this film?

Dr. William Weddington: There is an intrauterine contraceptive device present. There is a single calcification just to the right of the IUD. This density overlies the region of the urinary bladder, uterus and uterine adnexa. The small calcific density is much more dense than the adjacent phleboliths seen on the right side of the pelvic inlet. (Fig. 1)

There are multiple loops of dilated small bowel in the upper abdomen suggestive of the possibility of paralytic ileus or mechanical small intestinal obstruction.

The presence of a calcific density on the right side of the pelvic inlet suggests the possibility of ureteral calculus, with colic which could produce a paralytic ileus; however, this density is too medial in its location to be in the course of the distal right ureter.

Dr. H. S. Weens: What about this density? It appears unusually dense for its size. What is the densest structure in the body?

Dr. Weddington: The densities in the body, going from the least dense to the most dense are 1) gas or air, 2) fatty tissue, 3) tissues of water density, 4) bones, and 5) tooth enamel.

Dr. Weens: Do you think that this represents a tooth?

Dr. Weddington: Yes, this would indicate that there is a cystic teratoma or dermoid cyst involving the right ovary. With the very acute onset of the illness, the patient may have a dermoid cyst which has twisted and produced reflex ileus, which would produce the picture shown on the abdominal radiograph.

Dr. Whitaker: The patient underwent abdominal laporatomy and a twisted ovarian cyst was found. An abdominal hysterectomy and salpingo-oophorectomy was performed with resection of the twisted, strangulated ovarian cyst. (Fig. 2)

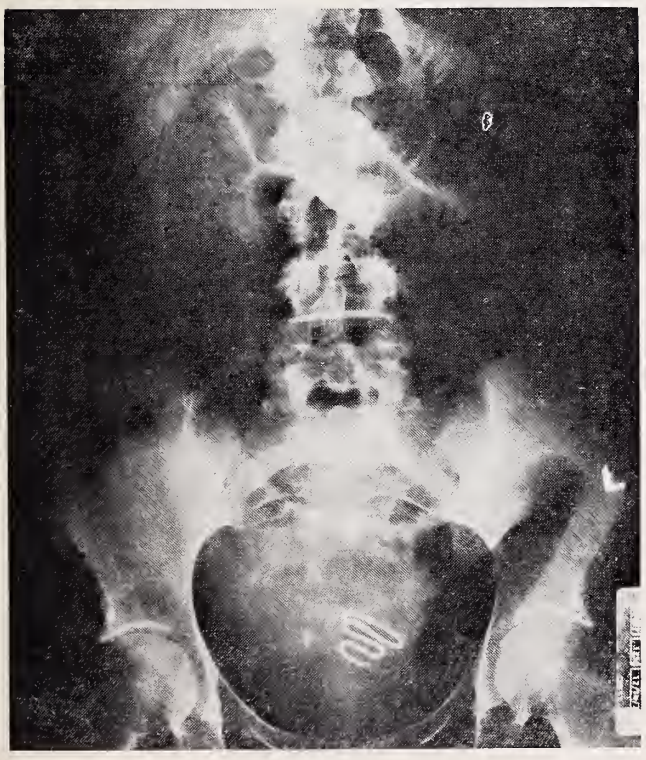

FIGURE 1

Film of the abdomen demonstrating a "dense" density on the right side of the pelvic inlet, just to the right of the intrauterine contraceptive device. There is distention of small intestinal loops in the upper abdomen.

FIGURE 2

Surgical specimen of uterus and adnexa. The uterus has been opened. The large arrows demonstrate the strangulated right ovarian cystic teratoma. The small arrows point to the tooth removed from the cystic teratoma.

* *From a weekly conference, Department of Radiology, Emory University School of Medicine, Atlanta, Georgia 30322. The conference material has been edited by Doctors J. L. Clements, Jr., and H. S. Weens.*

Comment

Cystic teratoma is the preferable designation for the tumor presented here, as the majority contain derivatives of all three germ layers. The term dermoid is more commonly used, however. The cystic teratomas comprise about 10 per cent of all ovarian tumors and appear most commonly during the childbearing years. They may be bilateral in 10 per cent to 20 per cent of cases. The most common complication is torsion, as this case presented. Less common complications are infection with rupture and malignant degeneration.

These lesions are particularly interesting to the radiologist because frequently a specific diagnosis can be made on routine abdominal radiographs. The classic radiological presentation is the demonstration of the densely calcified teeth or abortive bone formation within the tumor and also the visualization of the increased fat in the sebaceous material contained within the cyst. Sloan, in a study of 55 cystic teratomas of the ovary, found that 40 per cent of cystic teratomas of the ovary could be diagnosed by abdominal radiographs.

REFERENCE

1. Sloan, Robert B.: Cystic teratoma (dermoid) of the ovary; *Radiology* 81:847-853, Nov. 1963.

The advantages, limitations and potential of computer-aided diagnosis are discussed.

Some Thoughts on Computerized Medical Diagnosis

KENNETH C. LEVINE, *Atlanta*

IT IS NOT DIFFICULT to perceive that at some point in the near future, computers will be supplying preliminary medical diagnoses based on input data provided by medical technicians and other hospital aides. Hospitals will have computer centers with great masses of information stored on diseases and disorders, cross-classified by symptoms and expected results of all types of conceivable laboratory tests. Continuous updating of data from all available sources will be a daily task in the hospital environment. In many hospitals throughout the world, computers have already been used in taking medical histories, updating preliminary patient information with the results of physical examinations and laboratory tests, as well as in diagnostic analysis.

Although the computer can perform mathematical manipulation and logical analysis with great speed and accuracy, it will never replace the physician's decision making responsibility. However, the scarcity of qualified doctors is already a reality and the problem is getting worse. In order to optimize the utilization of this scarce resource, the maximum amount of routine analysis must be removed from the doctor's responsibility. In addition, with continuous advances in medical science, diseases and their treatments are becoming more and more subcategorized and specialized to the point that no one doctor could possibly be an expert in all phases of diagnosis and treatment. The computer can minimize errors of omission by basing its analysis on billions of bits of data compiled from the experience of doctors all over the world over many years of experience. A doctor could not afford to pass up the availability of such a mass of information if it were available at a moment's notice!

Utilization Problems

However, many problems exist in utilizing the computer for diagnostic purposes. In order for a computer to operate, it must be programmed with a set of "decision rules" in its determination of a diagnosis or in prescribing tests that should be administered to a patient, the results of which would be fed back into the computer for further analysis. An example of such a set of rules is as follows:

1. Take the given input data (past history, symptoms, results of standard procedures, etc.) and sort out all possible diseases or disorders that may be indicated by such factors, deleting those that are precluded by other factors (for example all symptoms except one may lead to a given disease or group of diseases which then might be ruled out with the inclusion of subnormal as opposed to high temperature that would be evident if the disease in question was in fact the patient's problem).
2. Select the appropriate test that should be administered that would diminish the resultant list of possibilities to the minimum number.
3. Accept data from test and continue to delete possibilities from list (or at this point, starting the analysis over again from the beginning with the additional input data now available).
4. Print out entire list of input data, tests administered, and the list of remaining diagnostic possibilities to be submitted to a doctor at this point. (A complete cumulative record of the patient would therefore be available and up to date at all times for the doctor's benefit.)

Although this process may seem reasonable and worthwhile, many problems exist in making it a workable system. After the initial analysis of the patient's symptom complex, a large number of possibilities will be left to consider. Therefore, the computer will most likely recommend a variety of tests to be administered (although the computer should be programmed to list the tests in order of value and sequentially reconsider its analysis and recommendations for further testing after each test). However,

many tests are expensive and uncomfortable and few patients would agree to any non-routine tests without first consulting a physician (even if just for sympathy and reassurance). On the other hand, the day may come (although I hope not) when the patient won't have this decision-making autonomy if he wishes to be examined and treated for an ailment.

Another consideration is that each doctor believes in different tests and different treatments for the same set of data. Hopefully, the availability of a fantastic wealth of information that can be tapped by the computer will enable doctors to eventually agree to some extent on the reliability of different tests and treatments when confronted with a given set of input data. If not, it might be feasible to have the computer programmed to apply a different set of decision rules for each physician. In addition, the formulation of a reliable data bank will be a monumental task and require the continued cooperation of medical personnel throughout the world, as vast amounts of data must be aggregated to form a basis for the diagnosis of rare diseases.

Implement Innovations

If these fundamental problems can be overcome, many other innovations could also be implemented to increase the value and credibility of computer diagnosis. For example, when sorting out additional tests that should be administered to a given patient, the computer will select the one test that would zero in on the true cause, given the input data, with the greatest validity. However, the computer would not know that its "best" test is 10 times as expensive as its second choice and five times as uncomfortable to the patient. Certainly, the doctor would consider these factors in his analysis! So why not program the computer to do the same? If the test selected by the computer has been programmed to have a high "coefficient of uncomfort," or "coefficient of expense," then the computer could appraise the value of the next best test. If there is a significant difference in the expected benefit of the two tests, the computer should print out "send for the doctor." If not, the second test choice could be administered and the process of re-evaluation and re-testing would continue until the doctor was finally needed. Obviously, since the analysis will not be infallible, a doctor could be consulted at any point in the analysis when deemed necessary by whomever is overseeing the procedure.

It should also be mentioned that potential errors in the diagnosis could be weighted by the severity of the specific error. For example, a very small probability of erroneously selecting an uncomfortable or dangerous test or treatment could be multiplied by a scale factor, so that the potential error will receive greater consideration in the decision process. An illustration would be a situation where certain indications lead to a diagnosis of rabies, but upon consideration of the consequences associated with an erroneous analysis, the computer would be programmed to consider additional tests that might point out the possibility of a rare disease with similar symptoms and a different mode of treatment, even though the probability of such a disease might be remote.

Many feel that the computer will de-humanize the diagnostic process. However, the ability of the computer to store, retrieve, and manipulate large quantities of data with great speed will remove a great deal of the physician's research burden and routine decision making. This will enable him to devote a greater proportion of his time to consultation with patients. In addition, he will have more time to devote to decision situations that truly require his professional competence.

The computer will never replace the physician in the diagnostic process. It is a tool, just as the thermometer, the stethoscope, and the X-ray machine are tools of the physician. However, it is a very powerful tool that will enable the physician to make more informed decisions in much less time in the future.

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BIBLIOGRAPHY

Anderson, J. A. and Boyle, J. A.: Computer diagnosis: Statistical aspects; *Br. Med. Bull.* 24:230, 1968.

Anderson, James R.: Computers in medicine; *Canad. Med. Assn. J.* 100:393, 1969.

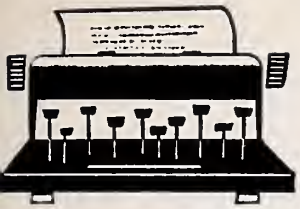
Boyle, J. A.: Computer diagnosis: Clincial aspects; *Br. Med. Bull.* 24:224, 1968.

Frenkel, Lawrence D.: Applications of computers in diagnostic medicine; *So. Med. J.* 62:1143, 1969.

Gamboa, Raul, et al.: Computer diagnosis of biventricular hypertrophy from the orthogonal electrocardiogram; *Circulation* 39:72, 1969.

Hall, G. H.: The computer in diagnosis; *Practitioner* 203:275, 1969.

Thomas, Edward L.: The future of computers in anesthesia; *Canad. Anaesth. Soc. J.* 15:519, 1968.



EDITORIALS

Earnest C. Atkins New MAG Secretary

Earnest C. Atkins of Decatur was elected Secretary of the Medical Association of Georgia at the 118th Annual Session, May 11-14, 1972 in Macon, Georgia. He succeeds John Rhodes Haverty of Atlanta.

A native of Marietta, Georgia, he was graduated from Emory University with an A.B. degree in 1947 and received his M.D. degree from Emory in 1951.

A member of Sigma Nu and Phi Chi fraternities, Dr. Atkins interned at the VA Hospital in Chamblee and Wheeler Hospital in Lafayette, Alabama, and did his residency at the VA Hospital in Atlanta.

He is a diplomate of the American Board of Surgery, Fellow of the American College of Surgery and the Southeastern Surgical Conference, past-president of the J. C. Thoroughman Surgical Society, president-elect of the DeKalb County Medical Society, and past-president of the Chambers County, Alabama, Medical Society.

Dr. Atkins is a member of the Board of Directors and treasurer of the Toco Hills Doctors Building, Inc., past state chairman of the Georgia Medical Political Action Committee and present treasurer of that organization, as well as the regional coordinator of the Reach to Recovery Program of the American Cancer Society.

Married to the former Mariana Costa, the Atkins have five children and live at 2190 Springwood Drive, Decatur.

Carson B. Burgstiner Named MAG Treasurer

Carson B. Burgstiner of Savannah was elected treasurer of the Medical Association of Georgia at the 118th Annual Session held May 11-14, 1972 in Macon. He succeeds John S. Atwater, of Atlanta.

A graduate of the University of Miami where he was a member of Phi Chi fraternity, he served both his internship and residency in obstetrics and gynecology at Memorial Hospital of Chatham County. He began practice in Savannah in 1962 as an associate of the late Dr. Albert Kelly.

Dr. Burgstiner is a Fellow of the American College of Obstetricians and Gynecologists, a member of the American Fertility Society, the American Society of Abdominal Surgeons, and a member of the Board of Directors of the Georgia Medical Political Action Committee. He is past Commander of the 165th USAF Dispensary of the Air National Guard, a 32nd degree Mason and past president of the Savannah Symphony Society.

Dr. Burgstiner is married to the former Jacqueline Cook and has five children.

Committee Conclave

The Fifth Annual Conclave of Committees will be held on Saturday and Sunday, August 12-13, 1972, at the Executive Park Motor Hotel, Atlanta. Since its inception in 1968, the concept of the Conclave of Committees has served to strengthen and improve the operational effectiveness of the Medical Association of Georgia. Through the meetings of 26 MAG operating committees in the same location at the same time, intra-committee relationships will be maintained making possible direct dialogue between committee members, chairmen and the officers of the Association. MAG members are invited to attend any committee holding special interest for them so that the committee will have the benefit of their counsel.

Individual committee calls and agendas will soon be sent out to committee members, along with reply cards. MAG will host a reception Saturday night from 6:30 to 7:30, with participants then free to select one of Atlanta's famous restaurants for their evening meal. Make plans now to attend, and share your ideas and plans for the coming year.

MAG, WELFARE AND THE MEDICAID PROGRAM—OUR OBLIGATION

THE PLIGHT OF THE UNFORTUNATE has always, and rightly so, been the concern of the medical profession.

Statism as expressed by welfare programs and medical care programs—for example, Medicaid—has not been the vogue for too many years. Until social reform became so popular the care of the indigent was borne almost in entirety by the physician and by charity hospitals which have been the vogue for centuries.

Beginning with the New Deal and the great depression of the 1930's we see an extension of the English Dole System which has brought all of us, including the welfare recipients, much and continuing grief.

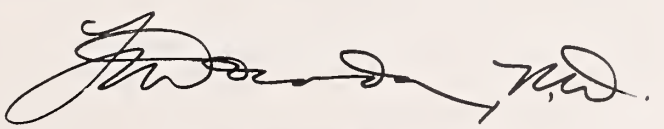
The welfare system as currently structured has produced in my opinion the following problems:

1) It has encouraged people not to work and not to strive for rehabilitation.
2) It has encouraged illegitimacy.
3) It has discouraged the act of matrimony.
4) The welfare recipient has been taxed 100 per cent of his earnings up to a point.
5) The health programs have not been tied to appropriate educational and nutritional programs plus work opportunities to aid the welfare recipient in his fight to overcome the disease of poverty.

What is medicine's responsibility?

a) We should insist on welfare reforms to correct the problems listed in 1), 2), 3), 4).
b) We should insist that the medical components of welfare programs be coupled with work opportunities, educational experiences and nutritional instruction sufficient to allow the welfare recipient an escape from the trap of poverty.
c) Lastly, we should insist that legislation involving the medical aspects of welfare should clearly state whether first line medical care is desired or whether a lesser type is wanted. If top quality medical care is desired, then I think we should insist on the same payment for care of the poor as is obtained for care of the rest of the population—otherwise, the physician, and he alone, is doubly taxed for this support of the poor.

If we are to obtain this fair treatment, we must provide public accountability through our Foundation programs as to its cost effectiveness.



F. W. Dowda, M.D.
President, Medical Association of Ga.

PRIVATE RETIREMENT PLANS PROPOSED CHANGES IN THE FEDERAL TAX LAW

J. WINSTON HUFF, *Atlanta**

As many physicians are aware, the self-employed professional person does not now enjoy the same privileges as the corporate employee to provide for his retirement years by means of tax deductible contributions to qualified pension and profit sharing plans.

Federal tax law now permits establishment of qualified corporate retirement plans into which there may be paid tax deductible contributions. In the case of profit sharing plans, these contributions are limited to 15 per cent of covered yearly earnings. If the corporation maintains both a profit sharing plan and a pension plan, the limit is 25 per cent.

However, a self-employed individual is permitted to contribute on a deductible basis only the lesser of 10 per cent of earned income or $2,500, whether he maintains one or both types of plans.

Largely because of this inequity, many states enacted tradition-breaking laws permitting certain professions to incorporate. The first Georgia Statute authorizing the corporate practice of medicine and other professions was "The Georgia Professional Association Act," enacted in 1961. Thus professional persons would be permitted to take advantage of the larger tax deductible contributions to their qualified plans as if they were corporate employees.

The Internal Revenue Service for years stoutly resisted the idea of the "professional association" or "professional corporation" and refused to recognize them as true corporate entities. After much litigation, in most of which these professional corporations were successful, the Service reluctantly reversed itself and accepted the concept.

After the new Internal Revenue position was made known, the General Assembly of Georgia in 1970 enacted "The Georgia Professional Corporation Act." This new Act embodied the prior concept of the corporate practice of certain professions, but dealt with the subject in a more detailed and specific fashion. The change in the attitude of the Internal Revenue Service and the new Georgia Act led many individual doctors and groups of doctors to incorporate. Their motive in many instances was the larger contribution allowed for qualified pension and profit sharing plans—a perfectly legitimate motive for those professional persons concerned about their welfare in retirement years. Certain problems and inconveniences presented to professionals by the corporate form of practice were subordinated to the concern to provide for themselves and their families in later life.

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* *Prepared at the request of The Medical Association of Georgia. Mr. Huff is a partner in the firm of Powell, Goldstein, Frazer & Murphy, General Counsel to the Association.*

Equalize Positions

Now, however, a number of measures have been proposed which would, in effect, more nearly equalize the position of the self-employed and the corporate employee as regards qualified plans. Among these proposals is that put forth in President Nixon's message to Congress on December 8, 1971. The President's proposal has been embodied in a Bill introduced in the House of Representatives on December 14, 1971 by Chairman Wilbur Mills of the House Ways and Means Committee (H.R. 12272, "Individual Retirements Benefits Act of 1971"). Hearings were had by Mr. Mills' Committee in May, 1972, but no further action by Congress has been forthcoming thus far.

This Bill, among other things, would permit a self-employed person to make tax deductible contributions to qualified pension and profit sharing plans (whether one plan or both plans) up to the lesser of $7,500 or 15 per cent of earnings. While still not as liberal as the deductible contributions allowed corporate plans, this represents an attractive increase which may well fit the needs of particular physicians.

No one can say when, if ever, this Bill or any of the other proposals will become law. However, physicians should watch the progress of these measures. If the Mills' Bill or similar proposals are enacted, consideration should be given to the advantages presented in determining whether or not to incorporate under the Georgia Act.

The corporate form of practicing a profession may sometimes present problems which are worrisome. Expenses of incorporation are substantial. Shareholder and directors meetings must be held to pass on many matters which an individual or partnership may informally handle. Minutes must be kept, resolutions adopted and (God save the mark!) lawyers employed. How do you reasonably set salaries among peers? What if one professional shareholder-employee desires to work longer hours or attend more meetings and seminars than his compatriots?

In the event a measure similar to the Mills' Bill is adopted and in the event the thus greater deductible contributions fit a particular doctor's financial situation, there may be less pressure to incorporate or to retain the corporate form of professional practice.

Aside from consideration of pension and profit sharing plans, the corporate form presents several advantages which will still not be available to self-employed physicians even if the Mills' Bill or a similar measure becomes law. Among the advantages referred to are deductible premiums for health and accident plans and for group life insurance (up to $50,000 in face amount); and medical reimbursement and wage continuation plans. Further, corporate employees can exclude amounts due under corporate plans from their estates by making certain timely beneficiary designations, an advantage not now available under self-employed plans.

These comments are of a general nature only and do not embody all of the provisions of the Mills' Bill nor all of the considerations which must be reviewed in determining whether to enter upon the corporate form of practice. Certainly any action which a doctor or group of doctors take in this area must be done only after consultation in detail with their tax advisors.

Eleventh Floor
C & S Bank Building

THE ASSOCIATION

SOCIETIES

The **Baldwin County Medical Society** and Auxiliary has established an annual scholarship to be awarded to a student in the Department of Nursing Education, Georgia College, Milledgeville, to consist of full tuition for the chosen student's second year in the Associate Degree Program.

PERSONALS

Second District

Joe Turner of Tifton has been appointed to the Board of Human Resources by Gov. Jimmy Carter.

Fifth District

John T. Godwin of Atlanta attended the recent joint meeting of the James Ewing Society, Head and Neck Society and American Radium Society Meeting in Boca Raton.

Seventh District

Richard Hammonds, of Austell, has been named to the newly formed Board of Offender Rehabilitation by Gov. Jimmy Carter.

Ninth District

Don Pittard of Toccoa has been appointed to serve on the Board of Human Resources by Gov. Jimmy Carter.

Tenth District

E. L. Cook has left his practice of 13 years in Thomson to accept a residency with the Department of Psychiatry and Neurology at the Medical College of Georgia, Augusta.

Nancy C. Flowers, professor of medicine at the Medical College of Georgia and chief of cardiology at the Veterans Administration hospital at Augusta, has been appointed by President Nixon to an 18-member advisory panel on heart disease.

DEATHS

Leonard W. Willis, Sr.

Leonard W. Willis, Sr., died May 28 at his home in Bainbridge after a lengthy illness. He was 80.

A native of Bainbridge, he was graduated from Tulane Medical University in New Orleans in 1915. He had practiced in Bainbridge since that time, serving in the U. S. Army as physician for the First Division, 6th Field Artillery in Europe during World War I.

Dr. Willis was a member of the VFW, the American Legion, the Lions Club, the Decatur-Seminole Medical Society, Medical Association of Georgia, Southern Medical Association, American Medical Association and Chairman of the Decatur County Board of Health. He also served for 10 years as a member of the State Board of Medical Examiners.

Dr. Willis is survived by his widow, the former Mary Eugenia Woodbery of Quincy, Florida, and two children, Mrs. Raleigh W. Rollins, and Dr. L. W. Willis, Jr., who was in practice with his father, both residents of Bainbridge, and eight grandchildren and two great-grandchildren.

JOURNAL
OF THE MEDICAL
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AUGUST / 1972

Georgia

Emergency Medical Care

See page 281

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AUGUST 1972 *Volume 61, Number 8*

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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Contents

Cover

Mobile coronary care equipment currently used in a limited number of ambulances in the Marietta-Atlanta metropolitan area. Photograph courtesy of Luther Fortson, M.D., Marietta. Layout by Robert Hamill, Atlanta.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

A review of recent progress in this crucial area.

Emergency Service Improvement Looks Bright

O. LYNDON BEALL* *and* CARL JELENKO, III, M.D.,† *Augusta*

A PRELIMINARY REPORT on emergency medical services in Georgia released recently by the Georgia Department of Public Health stirred up considerable interest and concern throughout the State. Although many members of the medical community were aware of the fact that emergency service was still in the Dark Ages compared to other areas of medicine, it came as a jolt to the general public to find that those on whom they must rely in times of crisis were more apt to jeopardize rather than enhance their chance for survival.

The report was a compilation and analysis of the information and data obtained by a survey of ambulance operators and hospital emergency departments throughout the State. A total of 153 hospitals and 357 ambulance operators were surveyed.

Glaring Deficiency

The most glaring deficiency revealed by the survey was the lack of training of ambulance attendants. Forty-five per cent of the ambulance operators said their attendants were not trained to splint fractures. Thirty-two per cent said their attendants were not even trained to control hemorrhaging. But even if the attendants were well trained they would still be ineffective because in answer to the question "Are all your vehicles equipped to splint fractures," 191 said no; to control hemorrhaging, 123 said no; to dress open wounds, 117 said no.

The survey also revealed that the hospital administration and medical staff are not as concerned as they should be about the kind of treatment the patient gets before he arrives at the hospital. In answer to the question "Do you think the level of proficiency of ambulance attendants is adequate," 91 said yes. This in spite of the fact that an abnormally high percentage of the attendants are not properly equipped or trained.

Shortwave radio communication between dispatchers, ambulances and hospitals is a vital element of the emergency medical care system. Even so, the survey revealed that only 121 ambulances and 29 hospitals had radios, and these were using so many different frequencies that a major part of the value of having radios was lost.

Study Commission

After studying the preliminary report, Governor Carter appointed a Study Commission on Emergency Medical Services and named Carl Jelenko, III, M.D. as Chairman. Other members appointed to the Commission were Lyndon Beall, Department of Public Health; Bob Bock, Independent Insurance Agents; Tom Callaway, Association County Commissioners; Jeanne Collier, Bureau of Planning and Community Affairs; Joe M. Harris, Municipal Association; Glenn M. Hogan, Georgia Hospital Association; Edmund W. Hughes, Georgia Safety Council; Senator W. W. (Bill) Fincher, Jr., and Representative Virgil T. Smith.

A summary of findings and recommendations was submitted by the Commission to Governor Carter

* *Director, Emergency Health Service, Division of Health.*
† *Chairman, MAG Committee on Emergency Medical Services.*

in December. Governor Carter reviewed the report and in a letter to the Commission Chairman stated that "Because of the importance of this problem I have decided to stay personally involved in the implementation of the needed changes." He appointed two of his assistants to the project and the outlook for improvement of emergency services in Georgia became brighter than ever before in history.

The Study Commission indicated that the single most urgent need was legislation regulating ambulance operators and attendants in Georgia. Such legislation had been submitted to previous legislatures but had failed on two prior occasions. An ambulance bill was currently under consideration by elements of the General Assembly which would require that all ambulances be licensed; that they be equipped to splint fractures, control hemorrhage, administer suction and oxygen. Further, ambulance attendants would under the proposed legislation be required to have, as a minimum, standard and advanced first aid training.

Funds Recommended

A second recommendation was that $67,500 be provided for instructor training and the purchase of medical training aids for the instruction of ambulance attendants and emergency room technicians. The Department of Education through Area Technical Schools located throughout the State using these funds and material in cooperation with the Department of Public Health would undertake this educational effort.

It was recognized that funds would be required to assist in the purchase of ambulances and other essential emergency equipment for those communities in which funeral directors currently operating ambulance services ceased operations upon passage of the ambulance statute. It was recommended to the Governor that $400,000 in State funds be made available for the Department of Public Health to pay 50 per cent of the local share of such purchases. The remaining funds would be supplied by Federal monies; and at such time as Federal funds were exhausted State funds would assume 75 per cent of the total cost. Thus, counties would be required to pay a maximum of only 25 per cent of the total cost of their equipment requirements.

It was further recommended that an increase of $2.00 be authorized in the annual fee for licensing of motor vehicles. This money, which is the price of five gallons of gasoline per year, would provide 5.6 million dollars which would be used to help ambulance services with the costs of operating ambulance services. This money would provide long-range State aid for ambulance operations.

Recommended Legislation

It was pointed out that no current requirement existed for reexamination of drivers with regard to their changing visual acuity. It has been determined that there are currently some 159 drivers legally licensed to operate motor vehicles in Georgia who are legally blind! It was recommended that legislation be adopted to require an eye examination of all drivers every four years.

The Georgia drivers' license permitted an operator to drive any motor conveyance. It was recognized that the tremendous increase in motorcycle traffic and resulting motorcycle-related deaths might be due in large part to licensed drivers who are not aware of the proper management of their machines. It was therefore recommended to the Governor by the Commission that legislation be adopted to require a test to demonstrate the ability of the prospective licensee to operate each separate type of vehicle he desires to operate before being licensed to drive it.

Finally, the Commission recognized that many drivers were habitual offenders in moving violations and had had their licenses suspended over and over. Many of these individuals continued to drive and to be involved in repetitive incidents. To solve this, it was recommended that a habitual offender statute be inacted. Such a statute would provide that anyone who, during a 10 year period was convicted of three major moving violations or 15 minor moving violations, would have his license suspended and if caught driving with suspended license, be subjected to a jail sentence. It was further recommended that the penalties be mandatory.

Physician Assistants

Finally, it was recommended that enabling legislation be developed jointly by the Medical Association of Georgia and the Board of Medical Examiners and the Georgia Department of Public Health to allow the use of physician's assistants in areas of the State where medical professional service is not readily available.

At its annual legislative session, the Georgia Legislature was presented and enacted five major pieces of legislation which addressed themselves to the problems set forth above and recommended by the Governor and supported by MAG and by the Governor himself. The Ambulance Bill, HB-370, was enacted into law and becomes effective January 1, 1973. It essentially accomplishes all the requirements outlined earlier. A visual re-examination statute was passed which will require visual re-examina-

tion of all drivers at renewal of their license on a four-yearly basis. Visual acuity corrected to 20/60 is required of all drivers. Driver re-examination is now required by act of the General Assembly for licensing to operate the various types of motor vehicles in the State of Georgia. A new habitual offender statute has now been enacted which embodies those provisions set forth above.

And, finally, enabling statutes creating the paraprofessional physician's assistant and defining his sphere of operations and his ability to work for a primary care physician has been passed into law by the General Assembly.

Fund Negotiations

The Governor is currently negotiating in two areas to make available sufficient funds for the State's share in vehicle purchase; monies for Emergency Medical Technician/Ambulance training in the Area Technical Schools have been made available and this training is now in progress—to be in 13 area technical schools by autumn; and it is probable that enabling legislation for modification of Georgia Code Section 92-2902 to provide for the $2.00 increase in annual vehicle licensing fees will go forward at the next meeting of Legislature. The monies generated from the latter will provide approximately $12,000 for the operational costs of each licensed ambulance in the State of Georgia.

The future of improvement in emergency service delivery in Georgia looks bright. Certainly, a legislative session in which the batting average is 1000 is encouraging! However, it is recognized that much remains to be done. The continued effort, thought, and devotion of all physicians and individuals interested in the health and welfare of the people in the State of Georgia are essential in keeping the future as bright as the present—and as bright as its potential appears to be!

Medical College of Georgia

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF COUNCIL
June 19, 1972

Appointments: H. Duane Blair, DeKalb County, Chairman, Communications Committee's Subcommittee on County Society Leadership Conference (MAGNET); G. Wayne Bohanan, Macon, Chairman, Communications Committee, Subcommittee on Liaison with News Media, L. C. Buchanan, Decatur, GRMP Regional Advisory Group; F. W. Dowda, Atlanta, GRMP Steering Committee; F. G. Eldridge, Valdosta, Chairman of Finance; Albert M. Davis, Atlanta and Walter S. Dunbar, Atlanta, nominated for Workmen Compensation Board vacancy, Internal Medicine-Diseases of the Chest; Robert E. Perry, Jr., Brunswick and John T. Godwin, Atlanta, nominated for the Workmen Compensation Board vacancy, Pathology.

Dates of MAG Conferences and Seminars: Committee Conclave, August 12-13, 1972; MAG New Educational Training Conference (MAGNET), November 11-12, 1972; Socio-economics Seminar, January, 1973; Education Conference, February 22-25, 1973.

MAG Legal Counsel-Podiatry: Received reports indicating that it would be necessary to retain Alston, Miller and Gaines, to handle any potential Podiatry suits.

Headquarters Building Expansion: Reviewed real estate appraisal and concluded that it would not be economically feasible at this time to continue with plans for expanding MAG Headquarters Building.

EMCRO Office Space: Approved acquisition of office space in First National Bank Building for EMCRO Project.

Foundation: Received report of recent news release on activities of Georgia Medical Care Foundation. Learned that negotiations for continuation of contract are underway between the Foundation and the Department of Human Resources.

Long Range Planning Committee: Received report from Chairman indicating: (1) Present Council districts should be retained; (2) Committee appointments should be made for a two-year period and each committee should have appointed a Chairman, Vice Chairman and Secretary; (3) If medical students are to be represented in House of Delegates they should represent entire student body and not SAMA; (4) That there be no reduction in the size of the MAG House of Delegates.

Northside Health Care Services: Requested Mr. John Kiser, Medical Association of Atlanta to report on the EOA proposal for development of health care delivery systems on the north side of Fulton County at the September meeting of Council.

Next Meeting: July 2, 1972, 9:00 a.m., MAG Headquarters Office.

GENETIC COUNSELING SERVICE

A clinic devoted to preconceptional genetic counseling and antenatal cytogenetic diagnosis formally began at the Medical College of Georgia on July 5, 1972. This clinic meets every Wednesday afternoon in the Faculty Pavilion 1:00 p.m. to 5:00 p.m. Physicians should direct inquiries regarding this service to: Paul G. McDonough, M.D., Department of Obstetrics and Gynecology, Medical College of Georgia.

Thickened Gastric Mucosal Folds

WILLIAM WHITAKER, M.D., *and* GWYNNE T. BRUNT, M.D., *Atlanta**

Dr. William Whitaker: This is the case of a 40-year-old male who presented with a history of epigastric pain for a period of two weeks. The pain was relieved by antacid. The patient had noted weight loss, and anorexia associated with the abdominal pain. On physical examination, a firm mass was palpated in the left hypochondrium. This is a representative film from the upper G.I. study. Dr. Brunt, would you comment on this film?

Dr. Gwynne Brunt: The most striking finding on the film (Fig. 1) is the marked hyper-rugosity that is plainly evident involving the fundus and extending along the greater curvature of the proximal stomach. There is also some nodular irregularity along the proximal portion of the lesser curvature as well. On this film, the distal antrum appears normal. There is evidence of peristalsis going through the distal stomach. There is also some contrast material in the colon indicating intestinal hypermotility. With the clinical history as presented, in association with a marked hyper-rugosity the two most likely possibilities are lymphoma and some form of Menetrier's disease, which is giant hypertrophic gastritis associated with protein loosing gastropathy. A less likely possibility would be a polypoid infiltrating carcinoma of the stomach. On the basis of this film alone, I don't believe I could differentiate these three conditions.

Dr. H. S. Weens: What about the Zollinger-Ellison syndrome?

Dr. Brunt: With the Zollinger-Ellison syndrome, the stomach also demonstrates evidence of hypertrophy of rugal folds, but I don't believe that the hypertrophy would be to this degree. The proximal stomach is a little too rigid to me to suggest some type of benign lesion.

Dr. Weens: Is the mucosa of the duodenum normal?

FIGURE 1

Gastrointestinal film showing marked hyper-rugosity of the fundus and proximal body of the stomach.

Dr. Brunt: The duodenal mucosal pattern appears normal. The Zollinger-Ellison syndrome is characterized by marked gastric hypersecretion with resultant chemical enteritis involving the duodenum and proximal jejunum with thickening of the mucosal folds in the duodenum and jejunum. The normal mucosal pattern of the duodenum and proximal jejunum would tend to rule out the possibility of the Zollinger-Ellison syndrome. I suppose there are rare infiltrative processes involving the stomach which could produce this degree of distortion of the mucosal pattern. The conditions that are related to

** From a weekly x-ray conference, Department of Radiology, Emory University School of Medicine, Atlanta, Georgia 30322. The conference material has been edited by Doctors J. L. Clements, Jr. and H. S. Weens.*

lymphoma, of course, could look like this, such as reticulum cell sarcoma or other sarcoma.

Dr. Whitaker: This patient had a reticulum cell sarcoma diagnosed in the tonsilar fossa approximately one year ago. There was also evidence of involvement of the cervical and mediastinal lymph nodes. The patient has received radiation therapy to this area. This was indeed reticulum cell sarcoma of the stomach, proved by biopsy taken through the gastroscope.

Dr. James Peters: How well does reticulum cell sarcoma of the gastrointestinal tract respond to radiation therapy?

Dr. Miguel Bozzini: When confined to the stomach and not generalized, reticulum cell sarcoma carries a good prognosis with radiation therapy with or without combined surgery. The prognosis is as good as with reticulum cell sarcoma confined to bone or the oral pharynx. A 40 per cent to 50 per cent five-year survival can be expected.

Dr. Weens: It is frequently very difficult to differentiate infiltrating lymphoma or Hodgkin's disease on one hand, and the so-called Menetrier's disease on the other. Occasionally, one sees a patient with giant rugal folds in the stomach, who undergoes surgery and no disease is found in the stomach on gross inspection or histological section. We really don't know what accounts for this.

Comment

The differential diagnosis of large gastric rugal folds is quite difficult for the radiologist since marked thickening of the rugal folds may be associated with benign or malignant diseases, and in some individuals represent a normal finding. The most likely diagnostic possibilities when this pattern is demonstrated on gastrointestinal studies include lymphoma, carcinoma, gastritis and giant mucosal hypertrophy.

Menetrier's disease is characterized by hypertrophy of the mucosa of the stomach, which may be localized or generalized. In this condition, the gastric glands in the involved area are increased and there is edema and inflammation. This condition is often associated with hypoprotinemia due to albumin loss through the affected mucosa. This condition is rare but should be considered in the differential diagnosis of gastric rugal hypertrophy.

Emory University School of Medicine

REFERENCES

1. Reese, D. F., Hodgson, J. R. and Dockerty, M. B.: Giant hypertrophy of the gastric mucosa (Menetrier's Disease): A correlation of roentgenographic, pathological and clinical findings: *Am. J. Roentgen.* 88:619-626, 1962.

2. Rourke, J. A. and Tonchiak, F. S.: Diffuse gastric abnormality—benign or malignant? *Am. J. Roentgen.* 96: 400-407, 1966.

LETTER TO THE EDITOR

FELLOW PHYSICIANS:

I have only a few words to say which I hope that you will read and consider.

Federal-Socialized medicine is progressing at a malignant rate and it is my belief that the traditional practice of medicine and the doctor-patient relationship is being changed quickly and dramatically not by local, state or federal legislation, but by increasing controls by third party interference. Insurance controls by all carriers have become frightening and are resulting in deception of the patient and frustration to and scapegoating of the physician. I urge that all doctors speak out, write and oppose the following in medical societies, specialty societies, and in your representatives to state and federal governments.

1. *Refuse*—Medicare consignments. The new law sets physician fees and then reduces fees regardless of the patient care or responsibility rendered. This will result in degrading medical care for the elderly.

2. *Refuse*—The Blue Cross-Blue Shield Federal Employees contract form (FP-38) or any other insurance company (carrier) form or forms which attempt to control utilization or prior approval plans.

3. *Refuse*—The generalization of Federal control over Hill-Burton Hospitals which attempts to set fees, hospital utilization and requirements for admission. This would bankrupt hospitals or significantly increase hospital rates of paying patients.

4. *Refuse*—The 2.5 per cent maximum fee increase "allowed" physicians with the understanding that almost all small businesses are now free of strict controls by the Price and Wage Commission.

I tire of being manipulated, threatened, harassed and tormented by an adversary that I cannot see or if named, transmutes itself into a multitude of names, committees and agencies with none assuming responsibility to me but each requiring greater responsibility from me. My patients are discriminated against because they are sick. I am discriminated against because I am a Doctor of Medicine.

Clyde B. Rountree, M.D.
Decatur, Georgia

A thought-provoking discussion of trends in our modern civilization.

Special Article

So What's Wrong With the Cave Man?

MELVIN ANCHELL, M.D., ABFP, ASPP,* *Los Angeles*

When 15-year-old Harold started experimenting with marijuana, his parents sent him to me for counseling. He was an intelligent youngster, with an adolescent's natural curiosity. My capacity was that of family physician and friend, with teenagers of my own as well as extensive clinical experience with the hippie generation, both hardcore and experimentive.

In discussion with Harold I asked as well as answered questions and presented facts for mutual consideration, leading Harold to formulate his own conclusions.

"The way I understand it, Dr. Anchell," he summed up, "is that fooling around with drugs and like that—well, you go backwards—retrogress—right?" At my nod, he continued, "so you go on like that and you wind up no better than a cave man. So who wants it?"

Harold proved to be more astute than his English teacher, in whose class he used his new argument against drugs as the theme for a paper. After reading it aloud in class, Harold looked up expectantly for approval.

"So what's wrong with the cave man?" was the instructor's deflating comment.

Confused, Harold was belligerent when he reported the incident to me. "So how do you answer a teacher with a question like that?" he demanded.

How do you?

What is wrong with the cave man?

Frame of Reference

As the admen and academicians say, it all depends upon the frame of reference.

There is nothing wrong with the cave man in his proper place. In his primal environment, he was eminently adapted for survival. Adaptations of the cave man are, however, pitiably inadequate for coping with the challenges of twentieth century life. They are as inappropriate as flailing a club at a jetliner streaking through the stratosphere.

When the cave man lived, his survival in a hostile natural environment necessitated using instinctual energies in the most direct manner. He killed for food. He attacked any creature, human or otherwise, interfering with his immediate wants. He mated at random.

Gradually, he learned the protective value of group living and a primitive culture developed. Individuals banded together under the rule of the strongest male, a patriarch who enforced his authority ruthlessly over weaker males and females. In these communes, individuality in personalities was not tolerated. Members took on average characteristics. Complete allegiance to each other tied the communalists together. The repressed hostility and competition between members was vehemently vented toward all others outside the group.

Social Evolution

With the evolution of the social order tribes merged to form the town, city-state, kingdom, the empire and finally the social order which we now call modern civilization. There were, also, mental changes.

Every stage of cultural growth has come about through the civilized control of raw primitive mental energies. Primarily, from the control of the individual's aggressive and physical sex energies, civilization developed and the human mind acquired a personal and social conscience.

The conscience, man's newest adaptation for survival, is still in the process of developing. This new part of the mind has overlaid the earlier instincts and has qualified, but not eliminated, their expression.

The most personal manifestation of the conscience is in the development of a compassionate and mo-

* *Member American Society of Psychoanalytic Physicians.*

* *Dr. Anchell appeared as a guest speaker at the 118th Annual Session of the Medical Association of Georgia, May 11-14, 1972.*

nogamous love between man and woman. This relationship finds its highest expression in a marriage of "two halves that make a whole," each finding in the other complete fulfillment—psychological as well as physical—in an intimacy which they cherish strictly for themselves, guarding it zealously from any outside intrusion.

The new survival instinct of conscience, embodying affectionate love and compassion, is as totally lacking in the new-horde subculture of today as it was in the Neanderthal man.

Pursues Destruction

Today's neo-cave men are pursuing a course of self-destruction. Their subculture, developing with alarming rapidity, is a psychological-retrogression to the primitive horde culture. In relation to the civilized society within which it flourishes, the neo-horde subculture is parasitic and cancerous.

Granted that civilization is not perfect; but these imperfections cannot be corrected by psychologically reverting to the cave man behavior. Yet there are those, from the murderous Manson to Harold's mocking instructor, who blindly advocate the cave man technique today. In this frame of reference, it is a technique of extinction—not survival.

The natural cave man did not need a conscience to survive in his primal environment. Today's human does.

The Degeneration Gap

During the period of adolescence, between 13 and 21, dependency of childhood progresses into the personal independence of the adult. The normal "adolescent rebellion" against family authority arises from this inherent urge to assert independence and prove oneself an adult.

It is a difficult period for both parents and offspring. But if benevolent authority, mutual respect and affectionate understanding have been previously established, there need be no communication gap.

The exaggerated "generation gap" that is so highly publicized today is, in some cases, no doubt the fault of overly authoritarian or overly permissive parents and society.

However, my own clinical experience places the greatest blame upon the premature seduction of children by socially sanctioned pornography, not only in the entertainment media, but even more in the schools under the guise of "sex education." "K-12" (Kindergarten through 12th Grade) sex educational materials, presented under the respected authority of the schools to captive young audiences, have an effect on the child's mind equivalent to seduction by a child molester.

Sex Education Victims

I have examined these materials and I number among my patients many of their victims. In fact, it is the victims of this so-called "advanced sex education"—as well as those who have been constantly assaulted by mass media (television, motion pictures, pornographic publications) portraying raw sex —who are retrogressing into the neo-horde subculture that is poisoning our society.

The six to 12 year old has little or no interest in the practical realities of sex. Children's questions on this subject should be answered honestly and to the point, without going beyond the information requested. To force-feed these young minds with factual portrayals of sexual matters beyond their needs—as the advocates of pornographic pseudo "sex education" are doing—is to stunt their natural development. Childhood fantasies remain unfulfilled, thirst for knowledge and creativity dries up and affectionate feelings fail to develop. In a tragically increasing number of cases irreparable harm results making a mature sexual maturation impossible.

When a child becomes unduly exposed to the genital sex act or other premature sexual activities, sexual growth is usually stunted. Later in life unresolved childhood sensual pleasures are relied upon to meet sexual needs. The constant assault of pornography, under whatever name—erotica, entertainment, education—has the same traumatic effect as a direct physical assault.

Thus are created the perverted recruits who are swelling the ranks of today's neo-horde subculture. Its members are psychological and emotional infants in physically mature bodies.

Their infantile attitude is evident in their desire for a life without social restrictions or obligations, their demand and dependency on others for supplying their material needs. What these neo-cave men really want is the illusory "freedom" to express inner desires in the manner of the cave man, complete with food stamps and other conveniences of the civilized society which they profess to scorn.

Immature Sex Life

Their arrested development is also manifest in their immature sex life. The earliest oral and anal stages of pleasure are apparent in their oral/genital activities and their relish of obscene language. The flaunting of nudity harks back to childish exhibitionism and voyeurism. Masturbation, natural in early puberty, is prevalent among these young adults—solitary, in pairs and in groups. When they mate in the mechanical gestures of copulation, it is merely intra-vaginal masturbation, completely lacking in the

affectionate component of mature sex. The practices of "group sex," homosexuality, bisexualism and other sexual perversions represent the distorted maturity of the sexually stunted.

Such is the physical tragedy of these people with adult bodies and infantile emotions. The psychological tragedy is even greater. Although arrested in its natural development, the complex mental apparatus of the twentieth century man remains part of their natural equipment from birth. The released force of unrepressed primitive urges may overwhelm the control of the conscience but the conscience cannot be obliterated. The conscience and the stages through which it developed are there, and are fighting for dominance in a desperate effort to function for the current survival of the human being. This subconscious struggle in the minds of neo-horde members creates unbearable tensions which are variously resolved by submergence into psychopathic behavior, resort to drugs, or suicide—all too frequently in successive steps.

Suicides Increase

The growing suicide rate among teenagers and young adults in our society attests to the self-destructive effect of the neo-horde subculture. So does the increasing prevalence of drug addiction, which is merely a slower form of suicide. Used as an escape from the tensions created by the subconscious conflict between primal instincts and the conscience, drugs also supply fantasies that serve as a substitute for those of the six to 12 year old period, of which these victims of early pornographic seduction were deprived. It is a desperate but futile effort of the ego to retrieve its natural pleasure from preteen sexual fantasies.

Alienation—the dissociation of the individual from society—is largely the result of interference with the natural processes of sexual development from childhood into maturity. Today's "sexperts" like to attribute alienation to "Victorian hangups" due to ignorance of sexual matters. But the results of sexpert-fostered "sex education" and pornography belie this diagnosis. The mass dissemination and forced feeding to children of raw sex are making alienation from family and religion practically endemic in sexually overstuffed youths.

Members of the neo-horde subculture are alienated from the social truths and personal needs of a civilized community. Responding to the horde psychology, they band together under the leadership of a dominant and domineering leader. Autocratic and ruthless, he demands absolute allegiance and is concerned for only himself. Primitive emotions and brute force, embodied and even defied in the leader, typify the horde. There is no tolerance of individual thought. The individual is completely submerged into a mindless group. Such qualities as kindness, compassion and affection for others outside the group are regarded as weakness. Completely egocentric, the horde leader is concerned only for his own needs and desires.

Subculture Example

The Manson murders are the most notorious example of the effect of the current neo-horde subculture in American society. True, this is one of the more extreme cases. However, the fact that this retrogressive psychological disease can spread in its most virulent form to infect entire societies is already established by such international precedents as Der Führer Hitler and his Nazis, Stalin's "cult of personality" in the USSR, Mao Tse-Tung's deification in Red China. Hitler's murders number some 6,000,000 German-Jews; Stalin's "Great Purge" brought death to many millions of Russians;* without official tabulation, the death purges of Mao Tse-Tung's Red China are believed to exceed those of Stalin. Horde enthusiasts fall so completely in love with their ideologies that there is no affection left over for people. These socio-political idolaters are devoid of compassion. Without compunction, fellow humans are slaughtered in the name of "social progress."

It might be interesting to note here that whenever this type of leader seeks to establish power—within his own sphere or that of others—his first step is to tear down social and family structures and values, and create a horde situation. Unnatural in civilized society, this psychological regression breeds anarchy, and anarchy begets dictatorship. Once a society is destroyed and a dictator secures control, strict rules and regulations are applied to those vanquished. The dictator and his horde subjects then employ their disruptive tactics against other societies toward an extension of power.

No country or people is immune to this process. Horde ideologies find adherents even in enlightened democracies. At first glance and from a distance, the absolute dictatorship of a horde leader may appear more efficient than the new evolutionary process of human self-government. But as man's new survival instinct of conscience has developed increasing strength, horde-type-dictatorships—in their attempt to reverse the progress of human society—are proving to be self-destructive. Hitler and his Nazis invited their own destruction, as did the other dictatorial Axis powers, from within as well as from without.

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* *Encyclopaedia Britannica, 1972 Edition.*

Under pressure of the people, disintegration of the dictatorship in Russia is becoming increasingly apparent.* There are even early signs of a similar process starting in mainland China. Whether the cure can proceed faster than the disease remains to be seen. If not, the neo-horde lemmings of today could carry a large part of the world along with themselves in the plunge to destruction.

Battle for Survival

Fortunately, in America the control of this disease is still possible. But the time to act is NOW.

When I refer to the neo-horde culture as a psychological disease of modern society, I am speaking from a medical rather than a political viewpoint. It does not matter whether it is called an "ism" or a cult or is nameless. As a physician, my criterion is what is natural versus what is unnatural—what sustains life, as opposed to what destroys life.

It is my conviction from clinical experience, observation and research that today's neo-horde subculture in our country is destructive, not only of its own members, but also of the civilized society on which it feeds.

If I sound like an alarmist, that is my intention. An infectious disease, if neglected while it is still controllable, can grow to epidemic proportions and become a devastating plague. This applies on the psychological as well as the physical plane.

Public Alarm

There is justifiable public alarm today about the increasing prevalence of venereal disease, especially among our young people—although the percentage infected is still a minority of the population. The same is true of cancer. A great amount of energy and money is being expended in the effort to control and eventually eradicate these diseases. Can we afford to be any less concerned about the cancerous psychological venereal disease that is on the increase (especially among our young people), although the percentage of these cases, too, is in the minority?

The clinical histories of many young patients that come into my office reveal a pattern of the influence upon the natural, healthy culture of today's youth by the diseased subculture. Part of the infantile psychology of the horde is its screaming for attention. Like infants, they protest loudly if creature comforts and wants are not forthcoming immediately. Horde substandards are spread abroad and arouse responsive primitive urges within the psyches of the looking and listening audience. Reactions can vary from experimentation out of curiosity, as in Harold's case, to suicidal despair. Released from the influence of social restraints, primal instincts may erupt like a destructive geyser which is almost impossible to recap. The struggle of the conscience to regain control without the help of society can be devastating.

Adults as well as adolescents become contaminated. Young intellectuals, such as Harold's instructor, give allegiance to horde-type ideals as a result of their own degradations. Members of the clergy succumb to the hippie cult as a release from rigid self-discipline, disguising this compromise with conscience as "freedom of the new truth." A certain coterie of psychiatrists—repudiating Freud's concept of total sexuality—foster the neo-horde subculture by prescribing a completely physical sex orgasm as the cure-all for tensions of whatever origin. With this as an excuse, adult and mixed youth-and-adult groups indulge in sex orgies including every type of perversion. "Sexual life" comes to mean engaging in acts producing orgasm and emission of sexual substances—nothing else.

This cancerous condition, this psychological venereal disease, is spreading throughout all strata of our society. A great deal is being said about it, but no overall effective action has been taken to control it. Can it be checked? Is there a cure?

Possible Cure

From my own clinical experience, I believe there is, if the problem is approached realistically. There are many phases, but for practical purposes only the first two can be considered here: (1) treatment of those already infected with the disease; (2) prevention of its spread.

The fallacy of the theorists—professors, psychologists, university and government officials, social workers et al. and even members of my own profession—in dealing with youthful members of the neo-horde subculture is their assumption that the horde cult does, indeed, represent social progress. It does not. One must remember that though physically mature, members of the horde are emotionally children or infants, and must be dealt with accordingly.

Example

Take the case of Florence, for example. The daughter from an influential, affluent family, she was brought up with high conventional standards in the home and was subjected to the usual mass media fare of raw sex and violence, plus "progressive" sex education at school.

By the time she came to me as a patient at age 17, Florence had been on drugs for two years, and had become a "pusher" to support her addiction. She

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** An example is the increasingly widespread underground circulation inside Russia of "The Right To A Conscience" by Nikolai Khokhlov (Possev-Verlag, Frankfurt/Main, Germany) since its first publication in the mid 1950's.*

had sought help from a local psychiatrist, who told her that her tensions and inner conflicts were due to the fact that she did not know how to have an orgasm. Since a young woman does not usually attain orgasm before her twenties, this diagnosis only increased her sense of frustration and inadequacy.

For six months I treated Florence, trying to lead her to the point of facing her basic problems and coming to grips with them. Apparently I helped to dispel some of her distorted views on sex, but I could not evoke a rational response to her drug problem, although this was ostensibly her reason for coming to me.

"It bothers me to think," she said. "Thoughts trouble me." The fact was, I realized, that she was afraid to come off drugs—afraid to face reality and independence. She had retrogressed to such a complete state of infantile dependence that she could not cope for herself, but fled to the pseudo-independent neo-horde world.

To such a world there is no intellectual or compassionate approach. One might as well try to reason with a recalcitrant child. The only method comprehensible to the neo-horde psychology is authoritarian —a strong "spare the rod and spoil the child" approach.

Florence was sentenced by the court to a strict correctional institution. During six months there under strict counseling, she began to grow again emotionally. The transformation in this girl was remarkable. Today at 19, she is a psychologically improved young woman. She has given up drugs and meets her inherent feminine psychological needs in natural ways.

I wish that every such case would respond as rapidly and as satisfactorily as Florence. Some take longer; some are so hopelessly retrogressed that they can never attain full maturity.

Effective Legal Action

In severe cases, such as the fanatic followers of a Manson-type leader, the only effective recourse is removal of the leader—by civilized legal means, not by the cave man technique of mob or vigilante action. True, the mills of the law grind slowly, but they do grind. The cost of the long, tedious court proceedings in the Manson murder trial is deplorable; however, any summary action would have sustained Manson's pose as a martyred messiah. This martyr image would not only have strengthened his hold over his adherents, but would also have extended his influence widely into the broad fringes of the neo-horde subculture. The long drawn-out trial has served to strip Manson of his self-image and reveal him as the homicidal psychopath that he is. His "family" has disintegrated, and a wave of disgust and horror has spread throughout the subculture with salutary effect.

The Mansons, the Rap Browns and their ilk represent the core of the cancer, which must be removed by skillful surgery or cobalt treatment. As with cancer, however, brutal techniques only serve to disseminate the disease and contaminate the healthy body of society.

Violent repressive action, as well as the opposite extreme of apathetic permissiveness and neglect, are equally ineffective and, in fact, accelerate or intensify the infection. To be effective, control must be administered with benevolent, nonviolent but inflexible authority, so unmistakably strong and self-controlled that it engenders respectful obedience. These basic rules apply, whether the authority be parental, medical, or civil.

For example, as reported in the May 17, 1971, issue of *Life* magazine, this is essentially the method used by Police Chief Jerry Wilson in handling some 50,000 tumultuous young demonstrators who converged upon Washington, D.C., with the intent of "closing down the government." There were some tense moments, some scattered minor violence and disorders, but Washington stayed open and the mob disbanded. A few of the mob remained, but they fell apart without their horde leaders.

Nonviolent Control

In the great majority of cases within the neo-horde subculture, drastic measures are not necessary. Members of a horde are preconditioned to regard kindness and compassion as weakness. But, like children, they respond positively when challenged to show that they must behave like civilized people. If parents and teachers fail to elicit this response, the challenge can be posed effectively by law enforcement authorities, as has been demonstrated in Palm Springs, California.

In recent years this desert oasis has been discovered and is being explored by increasing numbers of teenagers and young adults, especially during school vacations. A climax was reached several years ago when a massive rock festival was scheduled nearby. Swarms of young rock-music devotees assembled. A debacle ensued. Caught between adult citizens irate at the invasion of uncontrolled youngsters, law enforcement officials had a difficult time restoring and keeping the peace. But they learned a lot about dealing with young people.

By the time the next vacation invasion occurred, they were prepared with what has proved to be an effective preventive measure. It is a four-page fold-

er, its cover depicting the popular peace symbol with the caption, "Peace Has Its Price." The folder spells out "The rules that keep the peace in Palm Springs" in language that today's unrestrained youngsters use and understand.

The unquestionable firmness used in this folder is carried out in word and action by Palm Springs police officers, with the result that problems of disorder are few and far between. Hopefully, and apparently, young people thus influenced are developing a sense of civilized responsibility. The natural and therefore ideal place for such training to be applied is in the home.

Benevolent Firmness

Children need the sense of security and guidance provided by the combination of parental affection and benevolent firmness. The recurring complaint of many an undisciplined adolescent who gets into trouble with the law is, "My folks never did care enough about me to tell me what to do." However, unless standards in society support the family structure, the family's influence will be nullified.

The hope that delinquent young adults will automatically become good parents is absurd. The second and even the third generation of the neo-horde subculture is already upon us—from beatnik to hippie to yippie, each further regressed than the one before. As the outward symbols of this cult—long untidy hair, sloppy clothes, dirty feet, general slovenly appearance and attitudes—are adopted by more and more young people in the healthy sector of society, it is inevitable that horde-type ideals will also penetrate and permeate, especially when young minds have been made receptive by lowered social standards sanctioning pornography and violence.

Sex educators, who are truly interested in helping future generations develop better sex habits and who are not endeavoring to vent their own hangups on innocent students, must stop putting the cart before the horse. Instead of instructing children how to have orgasms, they should endeavor to teach them how to project a part of self-love into love for others and for mankind in general. In such a climate, there need be no fear that physical love will have difficulty in finding normal expression.

Maintain Civilized Values

As to outward symbols of dress, each generation develops its own. To raise an issue about the cut of hair or clothing is to obscure the real issue of basic values. Let fashions vary as they will. There is, however, truth in the old adage that "cleanliness is next to godliness." A certain physical discipline is required to keep oneself clean, and this has a psychological effect as well. Throughout the ages, cleansing has become symbolic of the development of conscience—and conscience is essential to human survival today.

For the continued existence of the conscience—and the human race—we must control and eradicate the *psychological* V.D. that threatens our civilization. Perverted sex education must be eliminated from our schools and pornography from our entertainment media—not to create vacuums, but to be replaced by healthy, natural education and entertainment. Civilized values and relationships must be maintained not only in the home, but throughout society. Individual conscience and social conscience must become mutually strengthened and strengthening, creating enlightened respect for the structure of the family and of society.

Idealistic? No—inevitable for that part of the human race which survives.

What's wrong with the cave man? He became extinct in an early stage of human development, because his survival equipment was inadequate. No attempt to revive him can alter that fact.

11633 San Vicente Blvd. 90049

The author records his personal experience in dealing with a frequently troublesome problem.

Mesentery and Abdominal Wall Closure

VANCE WATT, M.D., *Thomasville*

THERE IS A SAYING in the medical profession that "You don't learn any medicine until you get out of medical school." We also feel that a lot of techniques are learned in the practice of surgery, that were not demonstrated in surgical residency training.

A lot of papers are written about the general handling of this or that type of disease and in many cases specific details are given. We feel, however, that over the years we have developed and used certain techniques, which were not taught to us in training and which have not been seen by us recorded in the literature. We realize that these ideas may not be new to some surgeons, but we feel that a significant number might not have thought of them and therefore might be glad to know that these techniques have been tried and found to be helpful.

On resecting portions of the large or small bowel with anastomosis of the remaining ends, there results an opening in the mesentery, which requires closure, in order to prevent internal herniation. This opening may be closed without difficulty after the anastomosis in many cases, but often it is difficult to find the angle at the base of the mesentery, where the closure should start. We have learned that, if this angle is determined and the closure begun before the two ends of bowel are brought together, the completion of the closure after the anastomosis is greatly simplified. Utilizing a continuous suture such as 00 chromic catgut helps to identify the site of the portion already closed, when returning to complete the closure.

Advocates Technique

In closing the abdominal wall many techniques have been advocated. It seems to us that the type of suture used is not important, as long as it holds the wall together long enough to heal without evisceration or herniation, does not cause infection, and does not spit out sutures at a later date. Infection in the presence of certain types of material has made it necessary to go back and remove sutures from the depth of the wound. The technique we use has been a very satisfactory one over the years. We have had postoperative hernias, as has everyone. However, we don't feel they have been excessive, and we have never had an evisceration in the past 16 to 17 years with this technique.

Our routine is to close the peritoneum with the posterior fascia as a layer separate from the anterior fascia. At each level we use continuous 1 chromic catgut. We used to make this continuous from one end to the other, but often found it hard to be sure just where the fascial opening ended, especially in fat patients. By starting at each end with separate sutures and tying them together in the center, the closure is simplified. Subcutaneous bleeders are controlled by coagulation rather than ties, with resultant decrease in stitch abscess occurrence.

Use Mattress Suture

On closing the peritoneum and posterior fascia, occasionally the tissues are so poor that the sutures tear out. The fibers of the fascia in the longitudinal incisions run transversely. A suture pulling across the fibers will have a better chance of holding than one pulling in the direction of the fibers, so instead of a simple continuous suture we have found a continuous mattress suture to be very helpful. Here, too, we start at each end with separate sutures and tie them together in the center of the incision.

Stay sutures of #2 mersilene are placed through the skin, subcutaneous tissue and anterior fascia at one inch intervals in all upper abdominal incisions, and in lower abdominal ones, if there is any question about a problem of healing. One end of the suture is passed through a short piece of a catheter, so that,

when it is tied, there will be less likelihood of the suture cutting through the skin.

When stay sutures are used, there is no need to use subcutaneous ones. However, when they are not, we close this layer with interrupted 000 plain catgut.

Close With Catgut

Finally, the skin is closed with a running mattress suture of 000 plain catgut. Those who have not used it have expressed the fear that it would increase the chance of infection and stitch abscesses. We have not had this problem. There is no more infection than with silk and there is the added advantage of not having to remove these sutures. They will be absorbed by the body in about a week and in only rare cases is it necessary for skin sutures to stay in any longer than this. The stay sutures do the main job and they are left in for 18 to 19 days after operation.

An additional advantage of this method of closure becomes evident, when it is necessary to reenter the abdomen, whether in a week or so or after many years. There is no silk, wire, or other nonabsorbable material remaining which has to be dealt with, and this can be a real advantage.

In summary, we have described our method of closing the bowel mesentery and the abdominal wall with the hope that it will be of help to any surgeons who have experienced the difficulties mentioned, and might find our method a satisfactory answer to their problem.

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AMA RESOLUTION ON AETNA LIFE & CASUALTY COMPANY

During the MAG Annual Session, a resolution dealing with certain positions taken by Aetna Life & Casualty Company was adopted by the House of Delegates. Similar resolutions were introduced before the AMA House of Delegates. A substitute resolution, which follows, was finally adopted by the AMA House of Delegates. It is reproduced here in its entirety in order to inform all MAG members that action is being taken at the national level to deal with Aetna's policies and procedures in handling claims.

Resolved, That, in contracts where benefits include physicians' fees, the AMA make it unequivocally clear that management, labor and third party carriers shall consult with duly constituted representatives of organized medicine before determining "usual, customary and reasonable" fees; and be it further

Resolved, That wherever peer review mechanisms exist, it is essential that third parties make use of them as a primary method of resolving differences prior to threats of litigation; and, in turn, that peer review mechanisms be utilized when dispute exists between patient, physicians and third parties referable to the quality of medical care rendered, professional fees or the medical necessity for hospitalization; and correspondingly that the medical profession continue to actively support the development of peer review mechanisms where they do not exist; and be it further

Resolved, That the medical profession will not condone or tolerate action on the part of any third party that would encourage or promulgate litigation in the settlement of any such dispute; and be it further

Resolved, That all medical insurance carriers and health plans be informed of this policy; and be it further

Resolved, That the Council on Medical Service meet with representatives of Aetna Life and Casualty Insurance Company to satisfactorily resolve the current problem; and be it further

Resolved, That the AMA remind physicians that they have the right to enter into prior agreement with patients regarding the fee for services to be rendered.

NUCLEAR MEDICINE SEMINAR

A one day seminar on the Latest Technics and Developments in Nuclear Medicine is being held September 22, 1972, at Self Memorial Hospital, Greenwood, S. C., under the direction of the Department of Radiology which has been actively engaged in a nuclear medicine program for the past 12 years. Several eminent physicians in this field from around the country will present lectures and practical demonstrations oriented in particular towards radiologists, internists and technologists engaged in this field. For interested general practitioners AAFP credits have been applied for and are expected. Registration fee is $15.00.

The above program is sponsored by the South East Chapter of the Society of Nuclear Medicine, Department of Radiology of Self Memorial Hospital, The South Carolina Regional Medical Program and the Division of Continuing Education of the Medical University of South Carolina.

For further information and registration, please contact: Vince Moseley, M.D., Director, Division of Continuing Education, Medical University of South Carolina, 80 Barre Street, Charleston, South Carolina 29401.

Closer cooperation between the otological-audiological teams is advocated.

Special Article

Comprehensive Treatment for the Acoustically Handicapped

DAVID TWEEDIE, M.A., *Athens*

Cooperation between varied specialties has become a necessary part of the diagnosis and habilitation of physically handicapped individuals. Technological advances have separated professionals into various camps of specializations. These camps are complete with jargon decipherable only within the competency of the specialty.

In the area of deafness and aural handicaps, two specialized persons are required to work in conjunction with one another. The otologist whose primary responsibility is the diagnosis and treatment of an ear disease or disorder must work with the audiologist. The audiologist is concerned with measuring the extent of the hearing loss as well as the habilitation or rehabilitation of the aurally handicapped person. The audiological assessment of a hearing loss in many instances aids and further clarifies the diagnosis of the otologist. The audiologist is interested in the severity of the sensorineural hearing level so that proper amplification instruments can be provided. Standardized techniques are used to determine type and extent of amplification.[1]

Technological advances in the hearing aid industry have changed ideas concerning amplification for many people.[8] However, only through a thorough impartial evaluation can the proper hearing aid be selected for a candidate. The hearing aid salesman who has obvious biases toward the brand of aid he handles can never be considered as a reliable judge for selection.

The otologist's case load certainly prevents his evaluation of hearing aids and hearing aid candidacy. His valuable time must remain with medical considerations concerning the ear and its physiological function. The specialized field of audiology, however, can aid as a valuable ally to the otologist in this instance. Because of his interests in the rehabilitative aspects of a hearing loss, the audiologist must be the correct liaison between the physician (otologist) and the hearing aid vendor.

Dichotomies

A complex and industrial society such as ours produces ironical dichotomies within the area of hearing and aural handicaps. In one setting we are using technological advances to identify a congenital hearing loss at birth. The work of Marion Downs at the University of Colorado School of Medicine is an inspiration to all involved in the diagnosis of the hearing impaired. Here infants are tested for a hearing loss within a day or two after they are born.[5] Thus, a congenital sensorineural hearing loss that might have gone on unnoticed until it produced a delay in language and speech could be identified early. It is now also possible to fit hearing aids at a very early age.[7] A deaf child could be afforded valuable years of amplification and therapy if diagnosed early. The parent is poorly advised if he is told to wait for the child to reach his second birthday.

Some technological advances, however, have produced dangerous side effects and are in some cases destroying hearing. The Committee on Environmental Quality of the Federal Council for Science and Technology state in their publication, *Noise-Sound Without Value,* [2]

> "Increased severity of the noise problem in our environment has reached a level of national importance and public concern. The problem is broad in scope; it affects almost every facet of daily living and not only has broad socio-economic implications but also affects the health and well-being of our citizens."

Our teenagers are destroying hair cells of the cochlea and self-inflicting a noise-induced high frequency sensorineural hearing loss. Studies have

proved that exposure to long periods of loud rock and roll music affect the hearing of our high school and college-age youngsters.[6] The seriousness of this problem is growing in proportions far beyond belief!

Increased Enrollment

The enrollment of students at many schools and classes for the deaf in the United States have almost doubled in the past 10 years.[3, 4] Factors such as epidemics of rubella and the advanced practices of obstetrics which save more babies' lives every year are contributing to these skewed statistics on deafness. Multiply handicapped deaf children are becoming the norm in schools for the deaf.

The geriatric population in the United States has also increased steadily. The United States Census Bureau predicts that more than 10 per cent of the population by 1975 will be over the age of 64 years. This group statistically evidences more hearing handicapped per capita due to advanced age hearing loss, presbycusis. A number of persons may qualify for Medicaid and therefore receive a hearing aid funded through this program.

Through cooperative efforts, the growing majority of hearing handicapped persons can be given proper medical treatment and rehabilitative services. The technological advances that have caused continuing specializations can work to the good of the patient if the otological-audiological team can develop for the future.

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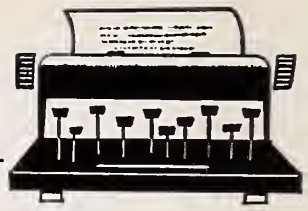
REFERENCES

1. Castle, W. E., Ventry, I. et al.: A conference on hearing aid evaluation procedures; *ASHA Reports.* Washington, D.C., American Speech and Hearing Association, No. 2, September 1967.
2. Committee on Environmental Quality of the Federal Council for Science and Technology: *Noise-Sound Without Value;* Washington, D.C., U.S. Government Printing Office, 1968.
3. Doctor, Powrie (ed.): Directory of services for the deaf in the United States; *Am. Ann. Deaf,* Vol. 113, May 1968.
4. ———: Tabular statement of American schools for the deaf; *Am. Ann. Deaf,* Vol. 103, November 1958.
5. Downs, Marion P. and Sterritt, G.: Identification audiometry in neonates: a preliminary report; *J. Audit. Res.* 4:69-80, 1964.
6. Lebo, C. P. and Oliphant, K. P.: Music as a source of acoustic trauma; *Laryngoscope* 78:1211-1218, 1968.
7. Miller, A. and Newberg, L.: Infant orientation to hearing aids: a new approach; *Am. J. Dis. Child.* 113:466-468, 1967.
8. Ross, Mark: Changing concepts in hearing aid candidacy; *Eye, Ear, Nose, Throat Mon.* 48:147-153, 1969.

EDITORIALS



"The Unheavenly City"—A Book For the Doctor

The Journal of the Medical Association of Georgia does not publish book reviews as a rule, but Editor Woody has kindly agreed to look at excerpts from a volume which deserves special attention from the medical profession (E. C. Danfield—*The Unheavenly City*—Little, Brown and Company, 1968, 1970). The author is professor of Urban Government at Harvard University. Among other points, he argues that problems relating to poverty are slowly curing themselves, that racism is not the most important factor leading to social unrest, and that many Federal projects designed to help the poor actually impede their progress. His comments are cogent and his prose is a joy to read, but some readers will doubtless find the book reactionary and controversial. Some quotations selected at random follow:

page 3—". . . the plain fact is that the overwhelming majority of city dwellers live more comfortably and conveniently than ever before. They have more and better housing, more and better schools, more and better transportation, and so on. What is more, there is every reason to expect that the general level of comfort and convenience will continue to rise at an even more rapid rate through the foreseeable future."

page 21—"To a large extent, then, our urban problems are much like the mechanical rabbit at the race track, which is set to keep just ahead of the dogs no matter how fast they may run. Our performance is better and better, but because we set our standards and expectations to keep ahead of performance, the problems are never nearer to solution. Indeed, if standards rise faster than performance, the problems may get (relatively) worse as they get (absolutely) better."

page 53—". . . the lower class individual lives from moment to moment. If he has any awareness of a future, it is something fixed, fated, beyond his control; things happen *to* him, he does not *make* them happen. Impulse governs his behavior, either because he cannot discipline himself to sacrifice a present for a future satisfaction or because he has no sense of the future. He is therefore wildly improvident: whatever he cannot consume immediately he considers valueless. His bodily needs (especially for sex) and his taste for 'action' take precedence over everything else—and certainly over any work routine. He works only as he must to stay alive, and drifts from one unskilled job to another, taking no interest in the work. . . . In his relations with others, he is suspicious and hostile, aggressive yet dependent. He is unable to maintain a stable relation with a mate: commonly he does not marry. He is a non-participant; he belongs to no voluntary organizations, and does not vote unless paid to do so."

page 90—"One would think that if society has less and less work for the unskilled, the price of unskilled labor would be declining relative to that of the skilled. In fact, over the long run it has increased. Before the Civil War, the unskilled worker earned only about one-third as much as the skilled; at the turn of the century he earned about one-half as much; now he earns two-thirds as much. Conceivably the time will come when he will earn *more* than the skilled worker."

page 211—"So long as the city contains a sizeable lower class, nothing basic can be done about its most serious problems. Good jobs may be offered to all, but some will remain chronically unemployed. Slums may be demolished, but if the housing which replaces them is occupied by the lower class it will shortly be turned into new slums. Welfare payments may be doubled or tripled and a negative income tax instituted, but some persons will continue to dwell in squalor and misery. New schools may be built, new curricula devised, but if the children who attend these schools come from lower class homes, they will be turned into blackboard jungles, and those who graduate or drop out will, in most cases, be functionally illiterate. The streets may be filled with armies, but violent crime and civil disorder will decrease very little. If, however, the lower class were to disappear—if, say, its members were overnight to acquire the attitudes, motivations, and habits of the working class—the most serious and intractable problems of the city would all disappear with it."

page 256—"What stands in the way of dealing effectively with these problems . . . is mainly the virtues of the American political system and of the American character. . . . Our devotion to the doctrine that all men are created equal discourages any explicit recognition of class—cultural differences, and leads to 'democratic'—and often misleading—formulations of problems: for example, poverty as lack of income and material resources (something external to the individual) rather than as inability or unwillingness to take account of the future or control impulses (something internal). Sympathy for the oppressed, indignation at the oppressor, and a wish to make amends for wrongs done to one's ancestors lead to a misrepresentation of the Negro as the near-helpless victim of 'white racism.' Faith in the perfectibility of man and confidence that good intentions together with strenuous exertions will hasten his progress onward and upward lead to bold programs that promise to do what no one knows how to do and what perhaps cannot be done, and therefore ends in frustration, loss of mutual respect and trust, anger, and even coercion."

Dr. Banfield's ideas about urban housing, mass transportation, minimum wage, public education, crime, negative income tax, welfare, etc. are equally provocative. Phrases removed out of context are often misleading, a very good reason for reading the whole work. Unless this is done some may conclude that the social pathology of the lower classes is due either to willful misbehavior or to genetic dysfunction, but there is a growing body of evidence that malnutrition can produce permanent physical and mental damage in the developing embryo. It is therefore at least possible that biochemical research can modify patterns of health and disease with relatively small amounts of funds.

We have already seen how Goldberger solved the pellagra problem in Georgia without adding a single bed to then-existing lunatic asylums and we have also seen one tuberculosis sanitarium after another close its doors when isoniazide was introduced. Those who are now planning radical changes in our health services should understand that advances in public health will probably be made by the research scientist rather than by the social planner. Dr. Danfield's book is fully capable of supplying background music for the ideological conflicts sure to come in this political year.

Thomas Findley, M.D., FACP

Highlights of AMA House of Delegates

The 121st Annual Convention of the American Medical Association was held June 18-22, 1972, in San Francisco, California. Meeting for a total of 17 hours and 20 minutes, the House acted on 59 reports and 130 resolutions.

Elections

The following physicians were elected or re-elected to Association positions:

Russell B. Roth, Erie, Pennsylvania—*President-Elect*

Norman H. Gardner, Connecticut—*Vice President*

J. Frank Walker, Georgia—*Speaker of the House*

Tom E. Nesbitt, Tennessee—*Vice Speaker of the House*

Trustees: Jere W. Annis, Florida (re-elected); Burt L. Davis, California (re-elected); Robert B. Hunter, Washington (re-elected), and Max H. Parrott, Oregon (re-elected).

Judicial Council: Burns A. Dobbins, Florida (succeeding Elmer G. Shelley, Florida).

Council on Medical Education: Perry J. Culver, Massachusetts (succeeding George W. Slagle, Michigan); Hector W. Benoit, Missouri (to serve out remainder of term of Burns A. Dobbins).

Opinion Poll

The House received and adopted results of the first membership opinion poll on critical issues affecting the practice of medicine. The overwhelming majority of 94,000 respondents (73.1 per cent) recommended that AMA continue to seek to retain the basic principles of private practice in any government enacted health program. And more than half (55.7 per cent) preferred the AMA plan of national health insurance over all others. The AMA plan was four times as acceptable as the next most preferable option, which was catastrophic coverage only (14.1 per cent). If compulsory national health insurance were adopted, 28.1 per cent of respondents said they would continue private practice "with those patients who would pay my private fees" and 24.6 per cent said they would "join the federal program and continue to practice under it." Many (21.6 per cent) were undecided as to what they would do.

Physicians' Assistants

Reflecting concern for "potential problems which could arise," the House approved a policy opposing employment of physicians' assistants in hospitals, "or (employed) by a fulltime, salaried, hospital-based physician." The House also adopted proposed guidelines for compensating physicians for services of physicians' assistants, stating that reimbursement for assistant's services should be made directly to the employing physician.

Allied Personnel

Also adopted was a report dealing with education and utilization of allied health manpower. Some of its recommendations urged AMA to:

1. Continue to support efforts to increase the number and improve the utilization of medical, nursing and allied personnel until 1975, with re-evaluation then on the need for further efforts.
2. Strongly reaffirm support of an expanded role for the nurse in providing patient care, and study the nurse's role in relation to the physician assistant, so the two professions can complement rather than duplicate one another.
3. Essentials of approved educational programs for urologic physicians' assistants, respiratory therapy technician and respiratory therapist, and for medical assistants in pediatrics were adopted.

Graduate Medical Education

The House approved the establishment of a Liaison Committee on Graduate Medical Education and a Coordinating Council on Medical Education. The panels will include representatives of the AMA, Association of American Medical Colleges, Council of Medical Specialty Societies, American Hospital Association, the public and the federal government.

Marihuana

After extensive debate, the following substitute was adopted in place of the Board of Trustee's recommendation: "This AMA House of Delegates does not condone the production, sale or use of marihuana. It does, however, recommend that the personal possession of insignificant amounts be considered at most a misdemeanor with commensurate penalties applied."

Fee Determinations

Delegates approved a strong resolution aimed at any independent determination of customary physicians' fees:

"Resolved, that where benefits include physicians' fees, management, labor and third party carriers shall consult with duly constituted representatives of organized medicine before determining 'usual, customary and reasonable fees,' " the measure said.

The resolution was adopted in lieu of several others, all protesting actions of Aetna Life and Casualty Insurance Company. It added "that physicians have the right to enter into prior agreement with patients regarding the fee for services to be rendered."

Medical Students

Bylaws changes which give medical students membership in the AMA and representation in the House of Delegates were approved by the House. A new class of direct membership for students was created, as was done previously for interns and residents.

Group Disability

The House approved acceptance of a new contract with the Fireman's Fund Insurance Co. to continue the AMA Group Disability Insurance Program. The contract is to run five years, ending Sept. 1, 1977, although the program is not guaranteed beyond Sept. 1, 1974. There will be no increase in premium, but benefits will be reduced by 50 per cent from age 65 through 69, and an additional 50 per cent at age 70, remaining at that level for life. The Board said Fireman's Fund insisted on the change and that no alternate carrier could be found.

Association and House Matters

Several proposals dealing with AMA structure and delegate representation and terms of office were considered. The House adopted a resolution endorsing preservation of the AMA as a federation of constituent and state medical associations, with proportionate representation as at present. The question of geographic representation on the Board of Trustees also was referred to the Council, with instructions to report back no later than the next annual meeting. On a proposal that trustees be limited to one six-year term, the House voted to ballot on the matter at the 1972 clinical meeting.

Resolutions must be submitted to Headquarters no later than 30 days prior to opening of the session at which it is to be considered, the House decreed.

Miscellaneous

The House adopted a report which said, "Insurance carriers should be urged to provide nondiscriminatory coverage for alcoholism and drug dependence."

Sheen Award

Paul Dudley White of Boston, internationally famed heart specialist, received the fifth annual Sheen Award (including a check for $10,000) for outstanding contributions to medicine.

The Prevention of Coronary Heart Disease

CHARLES E. JOHNSON, M.D., *Atlanta*

With recent emphasis on advances in treatment of coronary atherosclerotic heart disease, less attention has been paid to its prevention. While many of the newer specialized procedures such as saphenous vein bypass and advanced cardiac monitoring equipment remain in the hands of the specialist, the prevention of coronary artery disease is the responsibility of the primary physician.

It has been estimated that the premature coronary death rate could be reduced by 30 per cent by use of existing knowledge to alter major risk factors. This is far better than we have so far been able to attain once the disease becomes symptomatic. The risk factors which have been derived from abundant epidemiologic research now allow us to identify the patient with significantly increased risk of developing the disease in subsequent years. Hypertension, diabetes, hypercholesterolemia, cigarette smoking, family history of coronary heart disease, obesity and physical inactivity, as well as a "driving" personality pattern may all be associated with increased risk of coronary heart disease. While the full role and significance of each factor has not yet been completely defined, the urgency of the problem will not allow us to postpone action until all the facts are in.

Reversible Risk Factors

Of the risk factors which are potentially reversible, the four which are of major importance are hypertension, cigarette smoking, hypercholesterolemia and diet high in cholesterol and saturated fat. While moderate hypertension with diastolic pressures in the 90-99 mm Hg range is quite common in the U.S. adult population, too often these values have been dismissed as insignificant. Recent data has confirmed the increased risk of coronary heart disease in persons with mild hypertension and it is recommended that this should be treated as aggressively as the more severe types.

The fasting plasma of patients with elevated cholesterol should be analyzed for triglyceride content as well as by electrophoresis to determine lipoprotein phenotype. Of the two most common phenotypes, Type II with elevated serum cholesterol and normal or only slightly elevated triglyceride is treated with a diet low in cholesterol and animal fat but high in polyunsaturated fats. In addition to dietary therapy, a trial of clofibrate or other drug therapy is sometimes helpful. Type IV with elevated triglyceride and normal or elevated cholesterol responds well to weight reduction, restriction of dietary carbohydrates and clofibrate therapy.

With the demonstrated association of cigarette smoking with coronary heart disease it becomes the task of the physician to induce the coronary-prone subject to stop smoking. While the average smoker knows as well as his physician the danger of smoking, the coronary-prone individual should be cautioned of the excessive risk to which he unnecessarily exposes himself.

While emphasis on reversing risk factors is most essential in the coronary-prone individual, these measures must not be withheld from the public in general. The magnitude of the problem is such that we may not delay action until "final" proof of the benefits of our efforts has been obtained.

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Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

The Freeze

J. WINSTON HUFF, *Atlanta**

On August 15, 1971, President Nixon invoked the powers granted to him under the Economic Stabilization Act of 1970, and thus began what has been known as "Phase I" of the Wage-Price Freeze.

Phase I lasted until November 13, 1971, when a new set of regulations were issued to usher in "Phase II" under which all of us are now operating. Since the regulations and guidelines of Phase II affect the physician, we thought it might be of interest to highlight them here.

Although most small businesses, which would ordinarily include most medical practices, are exempt from Phase II, the "health services industry" is specifically subject to the Regulations regardless of the size of the unit.

This article will briefly summarize the Phase II regulations applicable to private or group medical practice. It must be emphasized that this discussion is general, and exceptions to the general statements made here do exist.

Prices

Physicians' fees are classified as "prices" and as such are subject to Price Commission regulations. The general rule is that a physician may increase his "base price" for the various services performed to reflect increased costs only to the extent that such an increase does not result in an increase in his profit margin over that existing in the "base period" (August 16 to November 13, 1971). In addition, the regulations place a ceiling of 2.5 per cent increase per year on the *aggregate* revenue increases over that which would have been generated had the base price schedule been used. Thus, even if your justifiable cost increases would produce an increase beyond 2.5 per cent of the aggregate revenue, you are still held to the 2.5 per cent ceiling.

The allowable percentage increase is computed on a "base price," which in most cases will equal the highest price charged 10 per cent or more of the physician's patients involving similar professional services during the "base period."

These limitations, however, do not apply to increases in income or revenue resulting from greater productivity, such as seeing and caring for a greater number of patients than in the "base period." The Internal Revenue Service, which monitors the regulations, requires each physician to maintain a "base price" schedule indicating his base price for each type of service, plus any increases. The physician must post a notice in his office that information from the schedule is available upon request.

Of course, prices charged to the physician for his supplies, drugs, equipment, etc. must also comply with the Regulations. If you suspect that a price increase to you is not justified, you have the right to require the supplier to demonstrate the correctness of his increases.

** Prepared at the request of The Medical Association of Georgia. Mr. Huff is a partner in the firm of Powell, Goldstein, Frazer & Murphy, General Counsel to the Association.*

Wages and Salaries

With respect to wages and salaries, the income of a self-employed physician or of a physician who is a member of a partnership, is subject only to the principles above discussed.

However, the remuneration of his employees, and of the physician himself if he is an employee of a professional corporation, is subject to the wage guidelines issued by the Pay Board. The general standard is that wages, computed at an hourly rate, may not be increased by more than an aggregate of 5.5 per cent per year. This limitation applies not to each individual employee, but to an appropriate employee "unit" generally consisting of employees holding relatively similar positions. The 5.5 per cent increase is applied to the total salaries of such a group or unit, and the allowable increase may be divided among that group of employees in such fashion as the employer may determine. Thus individual employees within a unit may receive increases of more than 5.5 per cent and others less, as long as the total compensation of that unit is not increased above the allowable ceiling.

The period for computing the increase, unless another period has been provided by contract, is from November 14, 1971, to November 13, 1972.

Fringe benefits, including bonuses, vacations, deferred compensation, firm cars, etc. are included in the determination of wages to the extent that they are "reasonably subject to valuation."

There are many exceptions and modifications to the Regulations on wages and salaries which may alleviate a particular situation.

Rents

The rent which can legally be charged by the physician's landlord is also subject to the Phase II Regulations. The "base rent" for the particular rental unit is determined by highly complex formulas which attempt to arrive at an amount which equitably represents the fair rental value of the units as of the date Phase I was implemented (August 15, 1971).

Increases above the "base rent" are allowed, but not to exceed the sum of 2.5 per cent of the "base rent" per year plus the increase in allowable costs occurring after that date. Before raising any rent, the landlord must give at least 30 days notice to the tenant setting out the fact and source of the increase.

If the tenant feels his rent has been raised illegally, he must first confront the landlord with his complaint. If he receives no satisfaction, he is then free to report the alleged violation to the Internal Revenue Service.

Reporting Requirements

A physician, or firm of physicians, whose gross annual revenues are less than $5,000,000 must maintain adequate records to support any price increase. If gross annual revenues exceed that amount, certain reports and notifications are required.

Penalties

A person who violates the Regulations may be subject to fines, criminal prosecution, a rollback in prices of three times the amount of an illegal price increase, or refund of illegal price increases. Further, the Internal Revenue Service may deny deductibility for Federal income tax purposes payments of wages, salaries, prices and office rents which are found to be in excess of the amounts allowed by the Regulations.

Conclusion

We must emphasize that this summary is designed to acquaint the physician in the most general manner with the requirements of Phase II as they apply to his practice and to alert him to any possible violations. A more complete treatment would necessarily include, by reference, the Regulations and Rulings under Phase II.

The law and Regulations in the area of wage and price controls are new and changing; and the physician should refer any detailed questions concerning prices, wages and salaries, and rents to his attorney or the Internal Revenue Service.

Eleventh Floor
C & S Bank Building

AMA ELECTS ATLANTAN TO SPEAKER'S POST

An Atlanta physician was elected speaker of the house of delegates of the American Medical Association during its annual meeting in June in San Francisco.

Dr. J. Frank Walker, the first Georgian to hold this office in the AMA, has previously served as vice speaker.

He has served as chairman of the board and president of the Medical Association of Atlanta, and speaker of the house of delegates of the Medical Association of Georgia.

He was also president of the Atlanta Radiological Society, the Georgia Radiological Society and the American College of Radiology.

Dr. Walker, a native of Jacksonville, Fla., was graduated from Oxford College of Emory University in 1948. He has been engaged in the private practice of radiology in Atlanta since 1953.

THE ASSOCIATION

NEW MEMBERS

Alfred, Dewitt C., Jr. Active—Fulton—P	80 Butler Street, S. E. Atlanta, Georgia 30303
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Whiddon, C. Maurice Active—Ga. Med.—Su	122 E. Gaston Street Savannah, Georgia 31404
Wofford, John B. Active—Whitfield—Er	Hamilton Memorial Hospital Dalton, Georgia 30720
Wynn, O. C. Active—Ware—FP	861 Folks St. Waycross, Georgia 31501

PERSONALS

First District

David Quinn retired in June after 24 years of service in the Dublin-Laurens County area as Director of the Veterans Administration and later as Director of the District Health Office.

Fifth District

Allan C. Bleich of Atlanta has been named a Fellow of the American College of Physicians.

Walter and **Gilbert Wildstein,** Atlanta, were in Israel to dedicate the State of Georgia Pylon at the John F. Kennedy Peace Forest in June. The Pylon, one of 51 forming the Kennedy Memorial, was dedicated as a memorial to the late Dr. Mitchell Wildstein of Brooklyn, N. Y., father of the Atlanta physicians.

Sixth District

Ben Jenkins, Newnan, was presented with a plaque of appreciation by Dr. Young Choon Lee, founder and chairman of the Korean Institute for Rural Health in Kaejong, Kusan, in June. Dr. Jenkins was instrumental in leading the Coweta Medical Society to send drugs for use at the hospital, a total of nine million dollars worth over a period of eight years.

Ninth District

Louis G. Cacchioli, Hartwell, was honored on the 25th anniversary of his beginning practice in Hartwell by the citizens of that town. Festivities proclaiming "Lou Cacchioli Day" were kept secret from the physician until the morning he stepped out of his office and found the townspeople crowded around his door. He was presented with a plaque and various other tributes commemorating the occasion.

George D. Gowder, Jr., will open an office in Blairsville, September 1, 1972.

A. A. Rogers, chairman of the Jackson County Board of Health from 1941 to 1972, was presented with a plaque in recognition of his distinguished service. His son, A. A. Rogers, Jr., M.D., presented it to him in June on behalf of the Board of Health and Health Department employees.

DEATHS

Walter Eugene Matthews, Jr.

Walter Eugene Matthews, Jr., Medical College of Georgia professor, died June 18 in an Augusta hospital.

A native of Augusta, Dr. Matthews was a member of St. Paul's Episcopal Church where he was a former vestryman.

He was a graduate of the University of Georgia and served his internship at University Hospital. He served two years of residency at the Duke University School of Medicine and two years at Strong Memorial Hospital, Rochester, N. Y.

Dr. Matthews was a professor of surgery and chairman of the department of otolaryngology at the Medical College of Georgia and the Eugene Talmadge Memorial Hospital, past president of the Georgia Society of Ophthalmology and Otolaryngology, member of the American Academy of Otolaryngology and Ophthalmology, member of the American Medical Association, American Laryngological and Rhinological and Otological Society and member of the Augusta Country Club.

He is survived by his widow, Geraldine Gerow Matthews, Augusta; two sons, Walter Eugene Matthews, III, Augusta and Wayne Gerow Matthews, Charlotte, N. C.; a daughter, Mrs. E. Dunbar Harrison, Jr., Athens; a brother, Fred Lewis Matthews, Orangeburg, S. C. and a sister, Mrs. Fred Cadle, Reliance, Va.

CLASSIFIED ADVERTISING

WANTED: Associate in well established Family Practice. Fine community, schools, recreation and place to live. Contact Dr. W. M. Watkins, P.O. Box 948, Dublin, Ga., or call 272-0451.

FOR RENT: Office space—516 Baptist Professional Building, 340 Boulevard, N.E., Atlanta, Georgia 30312. 404-523-8667.

INTERNISTS AND FAMILY PHYSICIANS badly needed in Atlanta suburb near third busiest airport in world. New offices available adjacent to new 385-bed South Fulton community hospital. Contact: Mr. Jim Henderson, Lee-Dixon Realty, Inc., 5075 Old National Highway, Atlanta, Georgia 30349. Phone: 404-762-8175.

EMERGENCY ROOM PHYSICIAN: Will function as part of team in providing full E. R. coverage. Salary established on basis of fees, with guaranteed annual minimum of $36,000. Appointment to medical staff required. Modern, expanding, 280-bed, JCAH-accredited hospital with medical staff of 60 and over 600 employees. Extremely desirable location in N.E. Georgia with the beauty of Blue Ridge mtns. and Lake Lanier, yet only 45 minutes from downtown Atlanta via I-85. Adequate leisure time. Write or call: Personnel Director, Hall County Hospital, Gainesville, Ga. 30501. 404-536-6611.

OB-GYN needed. Ideal location for solo or group practice. Rapidly growing area. Population now 33,000, expected to reach 60,000 by 1980. Served by 62-bed general hospital, JCAH fully accredited. 900 births annually in service area. Present active Medical Staff consists of 7 GP's (none are accepting OB cases). Service area has no OB-GYN. E.R. room staffed 24 hrs. a day by group of E.R. physicians on contract. Just 40 minutes from dntn. Atlanta on I-75. For further details, contact William B. Quillian, Jr., M.D., 41 Nelson St., Cartersville, Ga. 30120, (404) 382-1225, or hospital administrator, F. L. Mulkey, P.O. Box 508, Cartersville, Ga. 30120, (404) 382-1530.

JOURNAL
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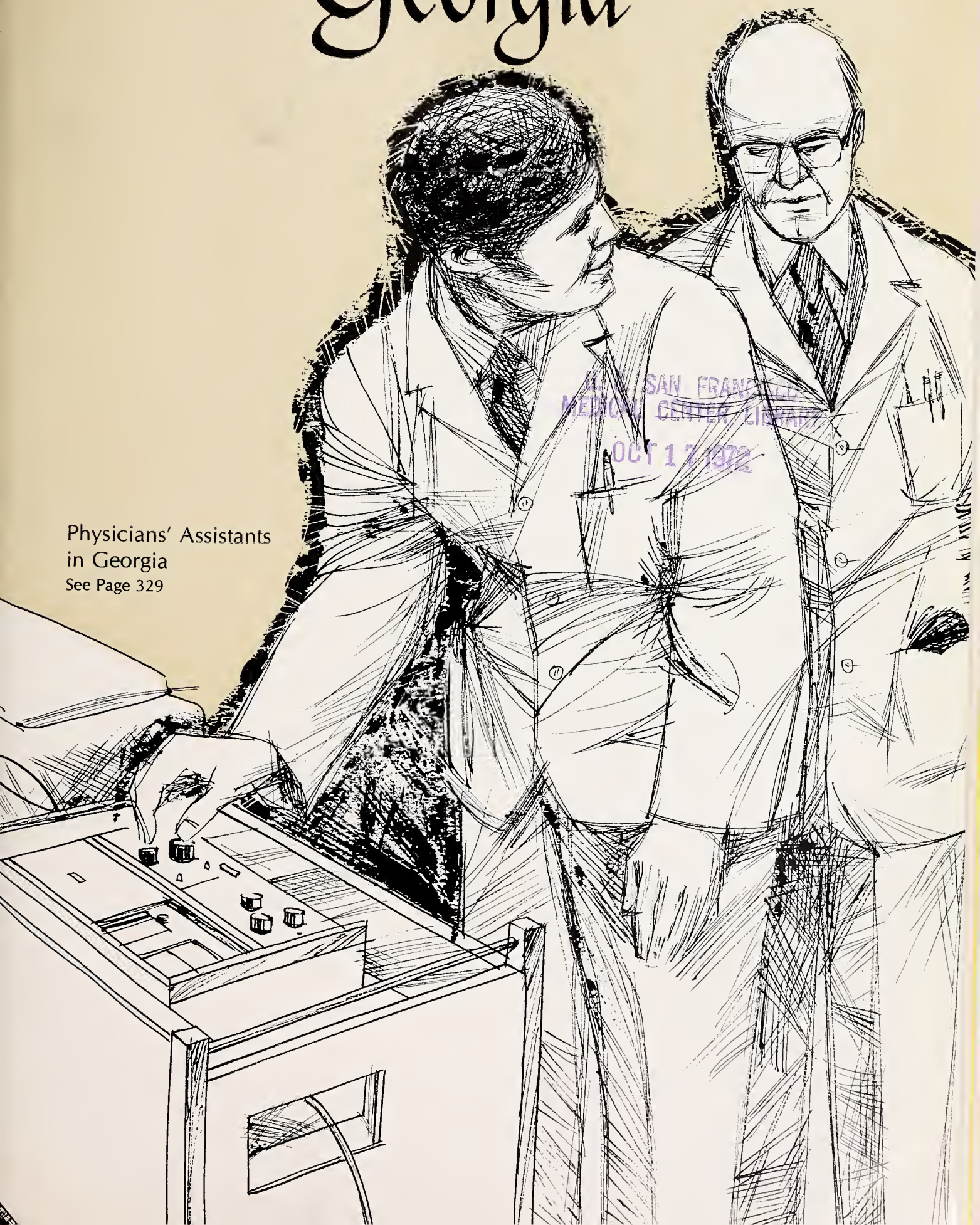
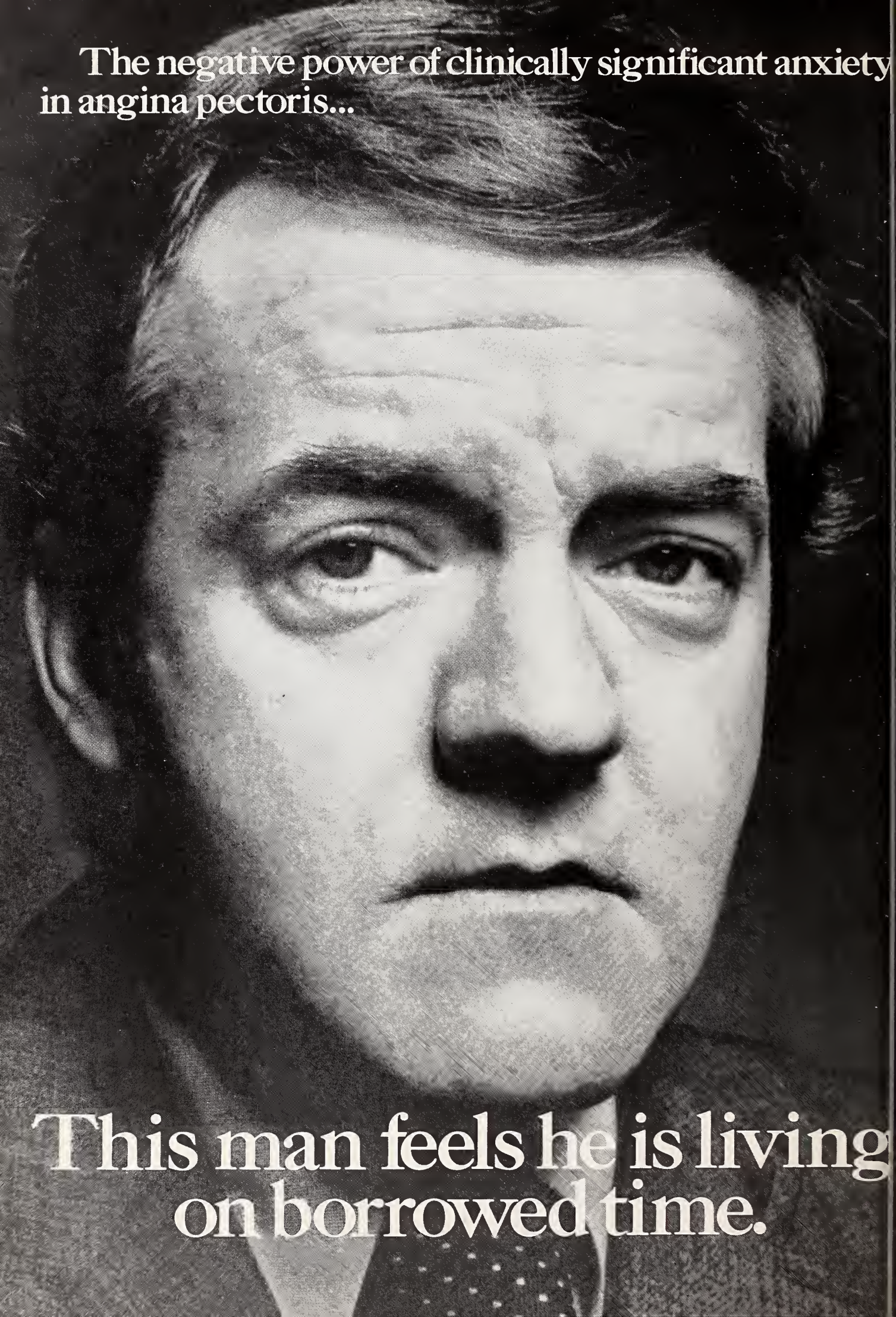
SEPTEMBER / 1972
Georgia



Physicians' Assistants
in Georgia
See Page 329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addendum

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MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
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Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
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The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

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Contents

Cover

Physician-supervised training and performance of the physician's assistant is depicted by artist Robert Hamill, Atlanta.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

In order to evaluate the approach of the practicing physician, 78 doctors in the greater Atlanta community were interviewed regarding the prevalence of suicide in their practices.

Suicide and the Physician: Experience and Attitudes in the Community

KENNETH R. WHITTEMORE, Ph.D.,* MR. JEFF NUGENT *and* MR. PAUL BOOM, *Atlanta*

SEVERAL PUBLISHED ARTICLES have emphasized that many suicidal patients present to their family physician a "cry for help."[1, 4, 6, 7, 8] These papers have urged the practicing physician to meet the challenge posed by these patients by promptly responding with encouragement, guidance and a watchful eye.

This study was aimed at determining how physicians felt about treating suicidal patients, how much training each had in suicide and suicide intervention, and how they handled these patients in everyday practice. Of interest, also, was information concerning the use physicians were making of the emergency telephone service provided by the suicide prevention center (Fulton-DeKalb Emergency Mental Health Service). Finally, it was hoped that new ideas for suicide prevention would be elicited.

Sample and Method

Of the approximately 1,200 community physicians in the Fulton County and DeKalb County Medical Societies, the names of 80 practicing physicians were randomly chosen from four medical specialties. The sample included 20 members of each of the following specialties: General Practice, General Surgery, Obstetrics-Gynecology, and Internal Medicine. Allowance for the greater number of physicians in Fulton County was made by choosing 15 of each group of 20 from this county.

In addition to the practicing physicians, 10 residents were also selected. The names of four medical and four surgical residents presently in training at Grady Memorial Hospital, the county hospital and emergency center for the above two counties were placed in the resident sample. All had served in the emergency room for at least one month during the preceding year. One surgical and one medical resident from Piedmont Hospital, a private Atlanta hospital, were added to the resident group.

The median age for practicing physicians was 45 years. Median years since last year of medical school was 20. Sixty-eight per cent of the total sample attended medical school in the southeastern United States, and 8 per cent attended foreign medical schools.

Each of the 80 private practitioners was sent a short introductory letter, assuring each of the confidentiality of the personal interview which would follow. Each was asked to list numerically the number of suicidal patients whom he had seen during the preceding 12 month period and subdivide these cases into completed suicides, suicide attempts, and verbal threats of suicide. They were also asked how many of these patients were seen in the preceding 30-day period.

Permission for personal interview at the physician's office was obtained by initial telephone contact. Five physicians could not be contacted, and alternates were randomly chosen to replace them. Eight physicians would permit interview by telephone only; two members of the original 80 refused to be interviewed. Thus, 20 internists, 20 surgeons, 19 obstetricians, 19 general practitioners, and 10 residents made up the final sample.

* *Director of Research, Division of Mental Health, Fulton County (Atlanta, Georgia) Health Department.*

During the interview, each physician was asked a predetermined set of open-ended questions regarding his experience with suicidal patients, his attitudes toward them, his psychiatric training, and his method of recognizing and treating the potentially suicidal person. Each individual was also encouraged to contribute whatever he thought important outside the structured general topics.

Results

Suicidal Patients in Private Practice

These physicians, who comprise approximately 10 per cent of the total number of stated specialists in this two-county area, saw 13 persons who later committed suicide during the 12 month period. There were 132 reported suicides in Fulton and DeKalb Counties during this same period.

One hundred and five individuals who attempted suicide were treated during this one year interval by these physicians. These attempts involved various degrees of intent to achieve total self-destruction; however, most were described as "serious" attempts. Some physicians dealt with many more attempts than did others. Six per cent had never seen a suicidal patient, although all had been in practice greater than 10 years. One of these men was a 66-year-old foreign-born general practitioner, who had been in practice for over 40 years. Table I presents data concerning the stated case loads of suicidal patients seen by these physicians.

Table II provides a breakdown of the types of suicidal patients seen per month and year by the four groups of physicians. The data reported for number of threats is not exact since many doctors recalled only "sincere" threats; others (particularly surgeons) could not give accurate data for this group. As can be seen, surgeons and general practitioners saw more patients who completed suicide, while internists and obstetrician-gynecologists heard more threats. It is of interest that the surgeons who saw 32 completed or attempted suicides could give no data concerning threats heard per year.

Attitudes

When questioned about their emotional reaction to suicidal patients, 77 per cent of the physicians stated that they were sympathetic and receptive, although approximately one-third felt frustrated with their lack of success with these patients. Four practicing physicians (three surgeons, one general practitioner) admitted that anger was usually their outstanding response. Thirteen were apathetic or could identify no strong feeling about these patients. Of the small sample of residents, less than one-half considered themselves sympathetic; three of 10 identified hostility as their outstanding reaction.

Only one physician in the entire sample admitted personal experience with suicide in his immediate family; however, 20 per cent know of a close personal friend or associate who had completed suicide. Ninety per cent of the residents and practitioners felt that their professional experience, and not experience with family or friends, most shaped their attitudes concerning suicide.

Eighteen of the total sample thought that patients who attempted or completed the act of suicide were in all cases either neurotic or psychotic individuals. Half said that these patients could not always be given a psychiatric diagnosis prior to the act.

Training

Ninety per cent of this sample could recall essentially no instruction in medical school regarding suicide. Older physicians commented on the lack of emphasis placed on psychiatry at the time they trained. Younger physicians said that, at most, only one or two psychiatry lectures were devoted to the problem of suicide and other psychiatric emergencies, while they were in medical school.

Recognition and Disposition

When asked to identify the potentially suicidal patient, the residents almost unanimously mentioned two groups, manipulative women who make impul-

TABLE I

NUMBER OF PHYSICIANS SEEING STATED CASE LOAD OF SUICIDAL PATIENTS (SUICIDES, ATTEMPTS, THREATS) PER YEAR

	Number Seeing 0/yr.	Number Seeing 1-3/yr.	Number Seeing 4/more	No. Who Have Never Seen a Suicidal Patient in All Years of Practice
General practice	4	4	11	1
Internal medicine	5	9	6	1
General surgery	7	10	3	3
Obstetrics-GYN	6	8	5	0

TABLE II

TYPES OF SUICIDAL PATIENTS SEEN PER MONTH AND PER YEAR BY PHYSICIANS*

	Internists Cases		Surgeons Cases		OB-GYN Cases		Gen. Practitioners Cases	
	Yr.	Mo.	Yr.	Mo.	Yr.	Mo.	Yr.	Mo.
Completed suicides ...	1	0	4	0	2	0	6	2
Attempted suicides ...	33	11	28	1	12	2	32	0
"Sincere" threats	25+	3	7	3	18+	1	50+	0

* Omitting the number seen by one internist, who was medical consultant to several Atlanta psychiatric hospitals.

sive gestures and truly depressed men and women. They described this second group as individuals who had lost everything, found themselves failures in achieving lifetime goals, and those who were facing "very heavy environmental loads." Three of the 10 residents mentioned the high degree of lethality of attempts by mood-cyclic psychotic persons.

All residents routinely referred suicidal patients to the psychiatric service immediately after tending to the acute medical and surgical needs. No resident had ever given the telephone number of the suicide prevention center to a suicidal patient, although eight of the 10 residents knew of the existence of this service.

Among the 78 practicing physicians, 72 described the deeply depressed individual as the most likely candidate for suicide. Two surgeons, one general practitioner, and one internist could think of no helpful sign or symptom which might alert the doctor to the increased probability of suicide in any given patient. Approximately one-half pointed out that sex and age of the patient had significance when trying to judge suicide potential. Most physicians voluntarily identified one or more of the following high risk groups: alcoholics, agitated depressives, patients with a previous history of suicide attempts, those with recent loss of a loved one, disastrous financial failures. Terminally ill patients were not considered high risks. Several gynecologists identified the introvert with insurmountable family problems as being most potentially suicidal. Five obstetricians stated that young unwed mothers commonly threaten suicide, but it was the older mothers with unwanted pregnancies who were especially genuine in their threats.

Each physician was asked if he ever posed a direct line of questioning to the patient as to suicidal thoughts or plans. Forty per cent said they did not hesitate to make such inquiry. Table III presents data concerning this issue. Twenty-six per cent never asked, either openly or subtly; most of these physicians considered it dangerous "to put such thoughts into the patient's mind," if these ideas were not already there. Three doctors stated that they thought their patients would become very angry if they "pushed this 'suicide thing' too much." Less than half of the surgeons interviewed never brought up the subject of suicide with patients, while only two of the 20 internists never inquired.

Each physician was asked to reveal referral agencies used, when he desired aid in caring for suicidal patients. Table IV shows agencies used and number of physicians using them.

Although 88 per cent of practitioners and residents were aware of the existence of the emergency telephone service, only 3 per cent had made use of this service. Psychiatric referrals were by far the most frequent method of disposition.

Ideas About Suicide Prevention

One-half of all those interviewed felt that earlier detection and more prompt psychiatric referral would somewhat lower the suicide rate. The most frequent suggestion for prevention was limitation of sedative dosages for individual prescriptions; two internists placed "no refill" on all sedative prescriptions. Education of physicians concerning the importance of early referral of suicide threats and attempts was suggested by many.

Two-thirds of all sampled physicians thought that the emergency telephone service might reduce the suicide rate; opinion was uniform that the prime purpose of the emergency service was to save lives. One-fifth thought that the project would turn out to be useless. Major criticisms were that the truly suicidal person would not call a stranger on the phone; truly suicidal patients could not be talked out of suicide if they "really" wanted to do it; and prank calls could very easily monopolize telephone time. Ten physicians expressed a desire for more publicity of the emergency telephone number. Suggestions included the printing of cards for the physician's desk, daily ads in the newspaper, and listing the telephone number in the front of the telephone directory with other emergency numbers.

It is clear that practitioners of medicine are making the diagnosis of "suicidal patient" at a very late stage. In the physicians' experience reported here,

TABLE III
METHOD OF HANDLING SUSPECTED SUICIDAL PATIENTS

	Internists	Surgeons	OB-GYN	General Practitioners	Residents
Asks without hesitation if planning suicide	11	5	8	7	9
Occasionally or rarely asks if planning suicide ..	7	4	7	9	1
Never asks if thinking about or planning suicide	2	11	4	3	0
Total	20	20	19	19	10

more patients were identified as being "suicidal" after suicidal action than were identified as being "potentially suicidal" prior to the time of life-threatening action.

The problem of recognition of the potentially suicidal patient is a complex one. The patient may hide his emotions from a cold or impersonal physician. The physician may miss all the clues of depression, and even if he recognizes depression, he may not think of (or want to pursue further) the possibility of suicide. The doctor may not obtain a complete social and emotional history of the patient, or the patient may withhold information, even when detailed questions are asked.

It is our impression that were a physician to seek out potentially suicidal patients in his practice, a substantial number would be found. The fact that 6 per cent of the physicians in this study had not knowingly talked to a suicidal patient in greater than 10 years of practice implies that at least this 6 per cent rarely looked for suicidal thoughts in their patients. We feel that the number of suicidal patients a physician sees in his practice is related to his diligence in careful inquiry about emotional and social health.

Most physicians know the danger signals of cancer, and 95 per cent of the physicians in this study knew the important danger signals of suicide, but these men are much more prepared to pursue a finding such as severe rectal bleeding than a finding of severe depression. Only 40 per cent of these physicians would ask without hesitation a severely depressed person if he were thinking of taking his life; 26 per cent never asked. Why do so many doctors avoid discussion concerning suicide with their patients? Is he afraid of the "danger" of introducing the idea? Is he afraid the patient will become angry with him for bringing up the subject, or is he afraid he will become angry if the subject of suicide comes up? Is he concerned that he will be inadequate should the problem of suicide arise? Is he "too busy" with organic disease to take the time to cope with emotional problems?

Litman[6] has emphasized that one is not introducing a new idea when he initiates discussion of suicide, for almost everyone has had brief suicidal thoughts. One is obtaining information which may save a life when he directly questions a suspicious patient concerning suicidal contemplations.

It was interesting to find that only four of 78 physicians interviewed would admit that anger was their outstanding emotional response when presented with a suicidal patient, for far greater than this number were observed during the course of the interview to exhibit feelings of disgust, frustration and annoyance. That the practitioner was ill-prepared to handle these patients is not surprising in view of the little formal training which each had received. Since internship the physicians have been in the practice of immediately shifting responsibility of the care of suicidal patients to psychiatrists.

Most physicians definitely felt that their role should be to get the suicidal patient to a psychiatrist as soon as possible, although many expressed dis-

TABLE IV
RESOURCES USED WITH SUICIDAL PATIENTS

	Internists	Surgeons	OB-GYN	General Practitioners	Residents
Psychiatric consultation or referral	19	16	19	14	10
County hospital emergency room	7	6	12	13	10
Telephone number of suicide prevention center	0	2	0	1	0
Psychiatric hospital (private or state)	16	10	7	11	10

satisfaction with the therapeutic results of psychiatric treatment. A few pointed out their preference for general practitioners, internists, and clergymen as most effective therapists for their suicidal patients. All nonpsychiatrists faced problems of restrictive hospital policies for admission of suicidal patients, requirements for constant attendance at the bedside of such patients, lack of adequate psychiatric supervision at many institutions, and the problem of sending the patient to a charity or state hospital versus a private hospital.

Physicians are not making use of the telephone service, although this 24 hour emergency agency is staffed by personnel specially trained in tiding patients through emotional crises, and referring them to appropriate professional help. Physicians are not convinced of the center's value, although similar emergency centers in other major cities have been of significant benefit to suidical persons.[5] Paradoxically, they felt that more publicity was needed for the telephone service.

Summary

Seventy-eight randomly selected private practitioners in greater Atlanta and 10 resident physicians were interviewed regarding their experience with suicide in the preceding year. Most physicians were inadequately trained to handle these patients alone, and most quickly shifted responsibility for care to the psychiatrist. Recognition and disposition of cases varied greatly with individual physicians. Most physicians were hesitant to directly inquire about suicidal thoughts. Limited sedative prescription and diligence in taking emotional history were thought to be the most important contributions individual physicians could make in preventing suicide.

99 Butler St., S.E.

REFERENCES

1. Avella, A. N.: Prevention of suicide; *New York J. Med.* 66:3023 (1966).
2. Capstick, A.: Recognition of emotional disturbance and the prevention of suicide; *Brit. Med. J.* 5180:1179 (1960).
3. Havens, L. L.: Recognition of suicidal risks through the psychologic examination; *New Eng. J. Med.* 276:210 (1967).
4. Inwood, E. R. and Anderson, M. M.: Suicide and the family physician; *GP* 30:130 (1964).
5. Litman, R. E.: Suicide prevention telephone service; *JAMA* 192:21 (1965).
6. Litman, R. E.: The prevention of suicidc; *Current Psych. Ther.* 6:268 (1966).
7. Motto, J. A. and Greene, C.: Suicide and the medical community; *AMA Arch. Neurol. Psychl.* 80:776 (1958).
8. Northeutt, T.: Answering cries for help; *J. Flor. Med. Assoc.* 51:301 (1964).
9. Ross, M.: The practical recognition of depressive and suicidal states; *Ann. Int. Med.* 64:1079 (1966).

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF COUNCIL
July 2, 1972

Podiatry Legislation: Voted to support legislation to define Podiatrists as Doctors of Podiatric Medicine rather than as Doctors of Medicine.

Committee on Communications: Authorized Chairman and staff to attend AMA Communications Institute in Chicago.

Quackery Legislation: Received report on MAG legislative activities regarding inclusion of Chiropractic coverage in all insurance policies.

Medical Ethics: Referred to the Professional Conduct and Medical Ethics Committee question of Anti-Trust implications in MAG's Medical Ethics.

GRMP: Received a report from Dr. Barrow concerning new directions of Regional Medical Program in developing new approaches to health care delivery.

GMCF: Received report from Dr. Dowda indicating that a new contract was being negotiated between the Foundation and the State Department of Human Resources.

EMCRO: Mr. Jablonowski reported that an additional $16,000.00 had been funded for the development of computer programming in the EMCRO Project.

Georgia Osteopathic Association: Appointed Committee to meet with Georgia Osteopathic Association to explore possibilities of MAG membership for Osteopaths with full practice licenses.

President's Report: Approved Dr. Dowda's suggestion to invite to all Executive Committee meetings the Chairman of GaMPAC, Director of GRMP and Chairman of GMCF.

Appointments: In addition to Dr. Eldridge as Chairman, Dr. Wells named Drs. J. T. Christmas and Fleming L. Jolley to serve as members of MAG's Finance Committee.

Physician-Hospital Disagreement: Approved advising physicians and hospital authority of Burke County Hospital that MAG Executive Committee would be agreeable to serving as Arbitration Board, if they so desired.

Next Meeting: Sunday, August 13, 1972, 1:00 p.m., the Executive Park Motor Hotel, Atlanta.

When the Government decides what drug should be prescribed, is the patient better served?

Relative Efficacy

MR. C. JOSEPH STETLER,* *Washington, D.C.*

In the fall of 1971, several officials of the Food and Drug Administration began stating that drug manufacturers should provide information on the comparative usefulness of their medications in the treatment of specific conditions. Such "relative efficacy" data, they said, should be made part of the prescribing information supplied to physicians in drug product labeling.

To persons familiar with the history of the Food, Drug and Cosmetic Act, the statements from FDA were far from novel. Indeed, the matter had been thoroughly discussed a decade before, when Congress was in the process of enacting the 1962 Amendments to the Act.

At that time, Secretary of Health, Education and Welfare Abraham Ribicoff stated unequivocally that those who had expressed concern that the new law might be used to permit the federal government to make relative efficacy judgments had "no basis for such apprehensions." The proposed amendments, he stressed: "would merely require a showing that the new drug described in the application is safe for use and is effective in use, under conditions prescribed, recommended or suggested, in the labeling thereof. This would not require a showing of relatively greater efficacy than that of other drugs. It would merely require that a drug . . . must live up to the claims made for it."[1]

When Colorado Senator John A. Carroll specifically asked Secretary Ribicoff if FDA wanted the power to decide relative efficacy, Mr. Ribicoff answered: "We do not seek it. We do not want it. And my testimony indicated we do not intend to pass on it. . . . We do not want to pass on relative efficacy. We do not want to say that drug A is better than drug B or B is greater than C. We are not looking for that at all, and we do not think it is necessary."

Change Position

Yet now it appears some at FDA intend to change the department's stated position, apparently on the unsupportable grounds that drug labeling that does not indicate the product's relative position on a therapeutic scale is not fully informative or is somehow false or misleading.

The question of whether relative efficacy *should* be judged by the government is preceded by the question of whether it *can* accurately be determined. For some drugs, experts have reached a consensus. In these cases, the less desirable drug either has vanished (bromides for anxiety, mercurials for diuresis), or has shrunk to prescribing levels justified by the advantages it retains (veratrum for hypertension, sulfonamides for infection). Results of this sort do not require government intervention.

There are, however, many areas of therapy and many groups of drugs for which a consensus has not been reached. Although no one seems to claim, for example, that the major antihypertensive drugs now available are indistinguishable with respect to efficacy or usefulness, informed experts decline to make arbitrary judgments about the order in which particular drug products should be used. Furthermore, a number of controlled studies have failed to show any significant difference between the major hypotensive drugs.[2]

This fact is a strong argument against legislation now pending (S. 2812, 92nd Congress) that would prevent the marketing of any drug not proven to be better than those already available. Had this bill been in effect when the first thiazide diuretics reached the market, it seems likely that only a handful would be available. Now the physician can choose from more than a dozen diuretic products to meet his patient's needs; and the availability of these alternatives has probably been a factor in the 15 per cent reduction in the price of the average diuretic.

Disincentives to Research

Had the FDA taken the shortsighted position that one or two drugs for each therapeutic need should

* *President, Pharmaceutical Manufacturers Association.*

1. Drug Industry Antitrust Act, Senate Subcommittee on Antitrust and Monopoly, part 5, September 13, 1961, page 2585.

2. For example, see: Aoki, V. S.: Hydralazine and methyldopa in thiazide-treated hypertensive patients. Amer. Heart J. 79:798-804, June 1970. Gibb, W. E., Malpas, J. S., Turner, P. and White, R. J.: Comparison of bethanidine, alpha-methyldopa, and reserpine in essential hypertension. Lancet 2:275-7, Aug. 8, 1970. Oates, J. A., Seligmann, A. W., Clark, M. A., Rousseau, P. and Lee, R. E.: The relative efficacy of guanethidine, methyldopa and pargyline as antihypertensive agents. New Eng. J. Med. 273:729-34, Sept. 30, 1965.

suffice, such disincentives to research would be the consumer's loss. It is thus impossible to justify the relative efficacy requirement from an economic point of view, let alone a medical one.

Still, some FDA employees are ready to decide such issues. According to the *Washington Post* of October 24, 1971, "some [FDA] scientists say that the diuretic market is saturated. 'We need another diuretic like a hole in the head' one FDA scientist said."

The American people must ask themselves: Do they want FDA deciding when the last diuretic has been discovered, or do they want to see further research leading to improved diuretics encouraged?

Later Advantages

In this connection, it is noteworthy that early tests of a drug often fail to uncover some of its best advantages. Because FDA traditionally has followed the lawfully required and prudent course of letting the relative merits of drugs be found through experience, many have been discovered to have unexpected major indications after periods of use for other, less important conditions. For example:

The early research on dimenhydrinate was directed toward its antihistaminic properties; only late in the program was another of its characteristics—its usefulness against motion sickness—noticed;

The first research using the phenothiazines was in sedation; the drugs' cardinal value in psychoses came to clinicians' attention later;

The value of isoproterenol in shock, of mafenide acetate in burns, and of lidocaine in cardiac arrhythmia, were not recognized for years after their widespread use.

Because in these cases FDA did not argue that still another antihistamine, another sedative, one more cardiac stimulant, yet another topical antibacterial and another local anesthetic was not needed. hundreds of thousands of patients have benefited enormously, in many cases to the extent of recovering the chance to live.

The National Academy of Sciences/National Research Council's 1969 Drug Efficacy Study commented on the point:

> "The final arbiter of the value of a drug is the consensus of the experience of critical physicians in its use in the practice of medicine over a period of years. Approval of a new drug for release to the market is only a license to seek this experience."[3]

Efficacy Roadblock

Another roadblock to definitive relative efficacy statements is the lack of unanimity as to the precise ranking of alternative therapies for many conditions; indeed, there often is no agreement about what the alternatives are.

Even in the case of the antibiotics, where it is often assumed that it is easy to match the medication against the disease, it is not uncommon to find authoritative disagreements as to the drugs of first choice (or second and third). For example, one well known medical guide[4] suggests that the drug of first choice in the treatment of acute gonococcal infections is procaine penicillin G, and that a tetracycline or erythromycin may be used as alternatives; a second and equally respected book[5] mentions no alternatives; a third[6] lists erythromycin ahead of tetracycline, and adds a cephalosporin to the list for the physician to consider; still another book[7] does not list any of the alternates listed in *The Medical Letter Reference Handbook*[4] and *The Merck Manual,*[6] but adds six separate penicillinase-resistant penicillins, and (any) sulfonamide. None of the referenced guides mentions spectinomycin, a relatively new (1971) antibiotic that has been the subject of numerous favorable reports.

Dr. Louis Lasagna, head of the University of Rochester Medical School's department of pharmacology and toxicology, has observed: ". . . the experts can err—witness the thromboembolic hazards of the Pill, or the clinical reports (so long derided) on the antidepressant properties of phenothiazines. . . . What is more, the experts often disagree among themselves—if you doubt this, poll any group of experts on the antibiotics of choice to be used in treating septicemia of unknown origin."[8]

Such disagreement, however, is not a question of one authority being right and another wrong. It must be borne in mind that the physician is dealing not only with a disease which may follow a varied course but also with an individual patient, whose reactions to the drugs prescribed may be crucial to the outcome of the therapy.

Therapeutic Relationship Factors

The four main factors in a therapeutic relationship are: (1) *Physician* prescribes (2) *drug* against (3) *disease* of (4) the *patient*. The notion of relative efficacy assumes that for a given *disease, drugs* can be ranked independent of *physician* and *patient*. This assumption is false. Because the individual patient's reactions can make it dangerous to give him what for most patients is the "drug of choice," the physician must be permitted freedom to use his own judgment.

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3. Drug Efficacy Study, A Report to the Commissioner of Food and Drugs, National Academy of Sciences, National Research Council, Washington, D.C., 1969, page 9 (mimeo).

4. The Medical Letter Reference Handbook, 1972, page 7.
5. Drugs of Choice, 1970-71, Walter Modell, M.D., Editor.
6. The Merck Manual, Twelfth Edition, 1972.
7. The Pharmacological Basis of Therapeutics, Goodman & Gilman, 4th ed., 1970.
8. Clinical Pharmacology and Therapeutics 11:3 (1970), page 443.

Recognizing the importance of allowing the doctor's judgment to prevail, Louis Weinstein, Ph.D., M.D., of Tufts, in his chapter on the chemotherapy of microbial diseases in the Goodman and Gilman text,[9] said:

> "Presentation of choices of specific agents for the treatment of various infections is always provocative of discussion and disagreement because such choices often represent the distillate of personal experiences that may not duplicate those of others. . . . To complicate matters, sensitivity patterns of a number of micro-organisms often vary with the hospital or clinic in which they are isolated. . . ."

Recent research in pharmacology indicates that there may well be a sound scientific foundation for recognizing the full importance of the use of skillful case-by-case judgment that cannot be performed by experts or authorities absent from the patient-doctor transaction. Recent discoveries suggest that the individuality of the patient, and of the physician, play very important roles in determining the effectiveness of drug treatment.

In one review we read:

> "Although it has been recognized for many years that patient-environmental variation is important in determining drug effects, only recently has it been appreciated that genetic factors may play a large part in subtle drug-patient variation. Not all drug-patient variations can be ascribed to genetic factors, but the increasing use of metabolic blocking drugs and enzyme inducing drugs has heightened the clinical awareness of possible subtle pharmacogenic problems."[10]

Rather than expend limited clinical research resources testing one well-known drug against another, the prudent use of those resources clearly lies in the development of entirely new compounds.

Consider Variables

In most therapeutic classes, the number of distinct drug entities of value in treating a particular condition is small, frequently less than a dozen. Information on the relative place of marketed drugs in weighing their therapeutic indexes against alternative therapy, and the overall ratio of desired effects to unwanted ones, is being collected and published in the usual ways. Using this information and adding his own background and experiences, the doctor considers all these variables—individual physician and patient differences, possible serendipity benefits of drugs and authoritative disagreements—when he writes a prescription.

But federally determined and enforced relative efficacy statements pose special legal problems for physicians. The question naturally arises: What does it mean when the government—as distinguished from a private body or expert—asserts that drug A is the one of first choice in condition A? What is the physician's legal position if, on the basis of his personal experience and educational background, he responsibly disagrees?

In 1967, Dr. Walter Modell reported that FDA lawyers were claiming that "publishers, authors and editors who have written, approved and published drug dosages which deviate from those recommended by the FDA are liable for damages. . . ." Objecting to this as regulation of medicine by fiat, he said: "In the case of every single drug, the determination of actual efficacy, proper dosage, and safe use requires substantial experience by the expert as well as by the general practitioner. It is held by many that it takes about five years before a definitive statement can be made about a new drug."[11]

FDA versus AMA

The issue was rejoined in 1970, when FDA Bureau of Drugs Director Henry Simmons, M.D., advised doctors that whenever they intended to prescribe a medication for use in a manner not approved in the official FDA labeling, they should first file a "Notice of Claimed Investigational Exemption for a New Drug" form.[12]

AMA's Department of Drugs objected vigorously, saying, "We believe the FDA should devote full attention to meeting its statutory obligations, not attempt to expand its statutory grant by regulating the practice of medicine."[13] AMA earlier had stressed that "the package insert is part of the labeling of a drug and not a legal restriction on the thoughtful and careful use of a drug by an informed physician."[14]

The freedom of doctors, however, is being undermined by expanding regulatory power in the area of efficacy rulings. Increasingly, in liability actions brought against physicians, failure to adhere to the labeling recommendations is being portrayed by medical malpractice lawyers as *ipso facto* evidence of wrongdoing.

One of the most astute students of the regulatory process in drugs worldwide is Sir Derrick Dunlop, the recently retired head of Britain's Medicines Commission, a sister agency to the FDA. Speaking at a symposium in Geneva in September 1971, Sir

9. The Pharmacological Basis of Therapeutics, Fourth Edition, edited by Louis S. Goodman, M.D., and Alfred Gilman, Ph.D., The Macmillan Company, 1970, page 1160.
10. "Medical Staff Conference: The Clinical Importance of Pharmacogenetics," Calif. Med. 111:291, Oct. 1969.
11. Clinical Pharmacology & Therapeutics 8:3 (1967), page 359.
12. JAMA 213:11 (1970), page 1902.
13. Ibid.
14. JAMA 208:589-90, April 21, 1969.

Derrick summed up the limits of regulatory power in the area of efficacy rulings by official regulators thus:

> "I do not believe that opinion on matters of efficacy should be formed by bureaucratic bodies, but rather through the free process of scientific publication, debate and undergraduate and postgraduate education. There is a danger that as regulatory agencies arrogate to themselves more and more the duty of dogmatising on the efficacy of medicines, that a so-called learned medical profession will eventually be reduced to signing forms entitling their patients to obtain such medicines as the regulatory agencies say they may have."

Clarification Asked

In a parallel vein, the Pharmaceutical Manufacturers Association wrote to the Commissioner of FDA on December 23, 1971, asking for a statement of intention from the agency on relative efficacy. "No authority exists in the stated terms of the statutes authorizing these activities by FDA," PMA President C. Joseph Stetler wrote, "nor is there any implied authority which might be derived from the legislative history of the Act."

Since pursuance of the plan to require relative efficacy statements "would significantly distort the practice of medicine," Stetler asked for an early clarification of FDA's position.

Four months later, in an address to the PMA's Annual Meeting, FDA Commissioner Edwards told PMA that "the physician—and he alone—can judge" the choice of medication, and that "FDA does not intend, through labeling, to pre-empt his judgment." But then he added that "if all drugs are properly labeled, relative efficacy ceases to be an issue."

The question, of course, is what is proper labeling?

It is the general rule for FDA to interpret its regulatory powers very broadly; it may therefore be assumed that some agency personnel might deem it necessary for a "properly labeled" drug product to include relative efficacy information. It is imperative that the professions, the pharmaceutical industry and the public be alerted to the dangers of any official action or unannounced application of such a position by the Food and Drug Administration. There must be general recognition that labeling requirements by FDA in the area of relative effectiveness, to the extent that they are given medical and juridical recognition, would represent a fundamental new departure for American medicine, under federal control, unlike that found in any other national system. In the end, much will depend on how effectively physicians and consumers express their desire to avoid bureaucratic control of this sort, and how well they demonstrate that such procedures do not serve the public interest.

1155 Fifteenth Street, N.W. 20005

Can the drudgery of dissection be alleviated without a loss in the educational effectiveness of the Gross Anatomy Laboratory?

Innovation in the Gross Anatomy Laboratory

GEORGE R. BERNARD, Ph.D.,* *Lubbock, Texas*

More than one-third of Georgia physicians—39 per cent to be exact—learned Gross Anatomy at the Medical College of Georgia. Over the years there have been changes in the way "Gross" has been taught. This year there have been some remarkable changes in the laboratory portion of the course. Last spring the dissecting laboratory was moved into the new Research and Education Building. But one set of fixtures, the wooden dissecting tables with their oil-soaked slate tops which for so long served the needs of student-physicians, stayed behind. The two new dissecting rooms are equipped with antiseptic, stainless steel humidor-tables.

We had been looking forward to moving into these new quarters because there was an urgent need for more space for our expanding classes. This year's entering class, at 154 students, is 45 per cent larger than the entering class just three years ago. While the class size has been increasing, the relative number of available cadavers has unfortunately diminished forcing us for the past few years to assign eight students to each cadaver dissection. Figure 1 is a photograph taken in the dissecting room in 1959; Figure 2 is a 1971 photograph for comparison. Not only are hair and clothing style changes obvious, but the current crowding is, too.

American medical schools are in a period of educational ferment. The medical curriculum has been dramatically changed and there probably will be more changes. The key vogue words for curriculum modifications are: "clinically relevant," "innovative," "experimental" and "multidisciplinary" or "integrated." The implication is strong that if your course cannot honestly be described by these adjectives then you just aren't "with it." The Gross Anatomist encounters no semantic embarrassment when he states that his course is clinically relevant. Gross Anatomy is by its very nature clinically relevant.

FIGURE 1

View of the Dissection Laboratory in 1959. (Photo courtesy of Thomas W. Lanier.)

The adjectives "innovative" and "experimental" are often used interchangeably in descriptions of curricular change. These words are *not* equivalent. A radical change in the way of doing something might be "innovative," but it is only "experimental" if the success of the new method can be compared with that of a control group simultaneously treated the old way. With considerable justification conservative medical educators have sniped at modern curricular reforms as "old wine in new skins." Reformers ought to be nagged (but usually aren't) by two related

* *Professor of Anatomy, Texas Tech University School of Medicine, formerly Associate Professor of Anatomy, Medical College of Georgia.*

FIGURE 2

A dissection group in 1971: prosection-demonstration in progress. (Photo courtesy of Patricia Hickson.)

questions: Is the changed curriculum better? and how can the improvement be measured?

Block of Time Approach

There are impediments to the integration of "Gross" with the remainder of the first-year curriculum. Of course some dissections, for example those of the viscera of the trunk, are easily adaptable to the multidisciplinary approach, but most of the other dissections are not. Because of this difficulty it has been impossible to integrate "Gross" into the curriculum we are currently presenting. And so a block of time has been allocated for us to present the concepts of Gross Anatomy and for each student to participate in a complete dissection. The block of time approach is not new; this is the way it has always been. Yet there is a big difference. Ten years ago the pace was leisurely. "Gross" was allocated over 450 hours then. This year 204 hours were allocated to the course.

Are 204 hours enough time for the student to achieve the competencies we expect? If lectures and recitations were the only learning experiences needed to achieve these competencies, then 204 hours ought to be more than adequate. But most anatomists believe that opportunities to dissect are valuable to every medical student a) in the learning of anatomical nomenclature usage, relations, variations, anomalies and the like, b) in the improvement of manipulative skills, observational powers and inquisitiveness, and c) in the development of habits of independent learning. There should be enough dissecting opportunities to achieve these educational objectives. If under the restrictions of a reduced time allotment and fewer dissection specimens these opportunities to dissect could be combined with opportunities for every student to teach (formally and under the supervision of an instructor) what he has learned to his peers, then the learning experience might be improved. It is generally agreed (among teachers, at least) that the best way to learn a subject is by trying to teach it.

The technique of prosection where the teacher dissects in advance is as old as Anatomy itself. The obvious advantages of prosection are that fewer cadavers are needed and much student time is conserved. There is some evidence[1] that students who learn their anatomy from prosected cadavers do as well in written recall and application tests as peer groups who dissect cadavers. But it is a passive learning experience and, as Alexander[1] noted, many of his prosection-taught students would have preferred the opportunity to dissect.

Experimental Technique

We experimented this year with a kind of prosection technique much like that described by Allison.[2] In Professor Allison's laboratory each dissection is made by a pair of students who formally present their work to their six colleagues. We call the dissection procedure a "prosection-demonstration."

Our entering class of 154 medical students was divided into three groups: two groups of 48 and one group of 58 students. One group of 48 was the "experimental group." Students were assigned to the groups on the bases of their collegiate cumulative grade point averages and the total of their Medical College Admission Test scores. We felt the groups were evenly matched. Dr. Maurice Levy of the Division of Educational Research, Medical College of Georgia selected the groups.

A different senior member of the faculty was assigned to teach each group for the entire course. The two control groups did a traditional type of dissection using a standard published dissection guide. The experimental group did essentially the same dissections at about the same times as the other two groups but used a specially written guide.

Four regional dissections were made: upper appendage and posterior triangle of the neck, the trunk, pelvis and lower appendage, and head and neck. The experimental group had eight exercises per region. A student pair from each group of eight

students was assigned randomly to do two "prosection-demonstrations" per region—or a total of eight for the course. All students were expected to appear in the laboratory for the half-hour when the demonstrations were scheduled at their table. No prosector pairs missed their assignment and attendance by their colleagues approached 100 per cent.

The prosectors were asked to log the time it took to make the prosection and prepare for their demonstration. On the average it took 6.3 hours for the pair of students to complete a prosection.

Evaluate Quality

An attempt was made to evaluate the quality of the prosections. Each of the six students and the instructor in attendance at the prosection-demonstration rated the quality of the presentation as "superior," "average," or "less than average." The evaluator was encouraged to contribute "remarks" on his evaluation slip. All slips were signed. In discussion the students had agreed that their performances during the eight prosection-demonstrations should count one-quarter of their final grade. These peer and instructor evaluations were revealed to each student at the middle and end of the course. At first the evaluations were fair. Towards the end an attitude of "judge not lest ye be judged" seemed to pervade some of the groups.

Allison[2] wrote: "We believe [prosection demonstration] presents the subject as an optimum learning process in the time allotted." In 1969-70 his students were allotted 132 hours. (He had no control group.) In our experiment all three groups had available 204 hours, but as is shown in Table 1, the "average" student in the experimental group needed to invest about 160 hours successfully to complete the formal class and laboratory work. The Table presents estimates based on data collected from students by questionnaire. The prosection-demonstration technique does save time. But does it present the subject as an optimum learning experience as Allison believes? This is difficult to assess and certainly cannot be answered on the basis of this experiment because this experiment compared the prosection-demonstration method with only one other method, the traditional dissection method which expects all students to participate actively in all phases of the work.

Examination Results

As the course was in progress I felt that the program was succeeding. This subjective feeling fortunately was bolstered by some objective data. A practical examination was given to the three groups at the end of each regional dissection. The results of these examinations are interesting. There was no statistically significant difference between the means of the experimental and either control group on the upper appendage exam. The experimental group, however, did significantly better ($p < 0.05$) than one control group on the trunk examination and the other control group on the lower appendage exam. The experimental group's performance on the head and neck exam was significantly better ($p < 0.01$) than both control groups' performances. On the negative side, the prosection-demonstration method does impose upon the student. Some evenings and weekends must be spent in preparation. At these times it is hard to find an instructor for help. This was a source of griping. On the positive side, as an instructor I find it exhilarating to witness the growth in anatomical sophistication and in self-assurance of the participating students. On unsigned questionnaires filled at the end of the course no student stated he would have preferred being in one of the control sections.

TABLE 1

SUMMARY OF TIME SPENT BY "EXPERIMENTAL GROUP" IN LABORATORY AND CLASSROOM WORK

Laboratory Work	Hours
Estimated average length of time to prepare prosections (8 at 6.3 hours each)	51
Approximate length of time to attend prosections prepared by other members of the group (24 at 0.5 hour each)	12
Approximate length of time to present prosections (8 at 0.5 hour each)	4
Special laboratory exercises in which all students participated:	
Trunk Topography	3
Heart Dissection	3.5
Cardiopulmonary Resuscitation Course	3.5
Estimated laboratory review time	32
Practical examinations (4 at 1 hour each)	4
Total	113.0
Classroom Work	
Classroom exercises (32 at 1 hour each)	32
Radiology lectures (5 at 1 hour each)	5
Review sessions (for NBME "Unit Specific Exam")	5
Examinations (3 written, one-hour exams, NBME "Unit Specific Exam")	5
Total	47

Not irrelevant are the examination results of the National Board of Medical Examiners Unit Specific Examination in Gross Anatomy which all three groups took on the last day of the course. The mean and standard deviation of the scores of the experimental group were 519 ± 91; those of the control groups were 495 ± 89 and 509 ± 99. The means are not significantly different. Incidentally, the scores compare well with the National mean of 500 ± 100.

In summary, this report describes a student-generated prosection technique and presents evidence that the technique not only saves student time but

also is as effective in reaching the stated goals as the traditional dissection technique. It might be said that this innovation was tested experimentally and proved successful.

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REFERENCES

1. Alexander, J.: Dissection versus prosection in the teaching of anatomy; *J. Med. Educ.* 45:600-606 (Aug.) 1970.
2. Allison, J. E.: Gross anatomy at the University of Oklahoma Medical Center; *J. Med. Educ.* 45:623-625 (Aug.) 1970.

STATE STOPS PRE-MARRIAGE BLOOD TESTING FOR PATIENTS OF PRIVATE PHYSICIANS

Pre-marital blood testing, which State Department of Human Resources laboratories in the past performed for patients of private physicians, will be discontinued Sept. 1, according to an announcement by Dr. John Venable, director of the Department's physical health division.

The legally required pre-marriage test for syphilis has been made in state labs in Atlanta, Albany, Macon and Waycross, Dr. Venable said and totalled "some 33,000 examinations a year of samples submitted to us by doctors in private practice."

The official explained that the policy change implements a cost-cutting recommendation that was part of the state reorganization plan.

"Our laboratory unit has approved more than 150 private labs in the state to do these official tests for a fee," said Dr. Venable. "We will continue to provide the laboratory service on samples submitted by local health departments. The change affects only individuals who presumably can afford the fee."

A "Cold" Solitary Nodule in the Thyroid

J. L. CLEMENTS, JR., M.D. *and* H. S. WEENS, M.D., *Atlanta, Editors*

DR. AL MORLANG: The patient for presentation today is a 26 year old euthyroid female who has unilateral enlargement of the right thyroid gland. Here is her scan. Dr. Bagby, would you comment on this scan?

Dr. Richard Bagby: The left lobe of the thyroid appears normal, it looks like it has a normal uptake. The uptake is given as being euthyroid, with 26 percent uptake in 24 hours. The right gland is somewhat enlarged and appears to contain a solitary cold nodule in its midportion. This cold nodule measures approximately 2 cm. (Figure 1).

I think that the differential diagnosis is essentially that of a cold nodule in a slightly enlarged thyroid gland. With a cold nodule which is 2 cm. in diameter, the possibility of thyroid carcinoma must be suspected. Approximately 25 percent of solitary cold nodules turn out to be carcinoma. This lesion could also be a colloid cyst. A non-functioning adenoma or hemorrhage into a thyroid gland could also be a possibility. Parathyroids occasionally are embedded into the thyroid gland and I suppose a parathyroid adenoma could produce a solitary cold nodule within the thyroid gland. I do not think that a thyroglossal duct cyst could present with this appearance since these are midline in location.

Dr. Yavuz Tarcan: Why do you pay attention to the size of the gland?

Dr. Bagby: I think that in carcinoma the thyroid gland is less likely to be enlarged than with some benign condition, such as colloid cyst.

Dr. Morlang: Does the patient's age and sex influence your differential diagnosis?

Dr. Bagby: A young female patient with a solitary nodule would make one more suspicious of the possibility of neoplasm.

Dr. Morlang: Are there any other procedures you would recommend that this patient have before surgery is recommended?

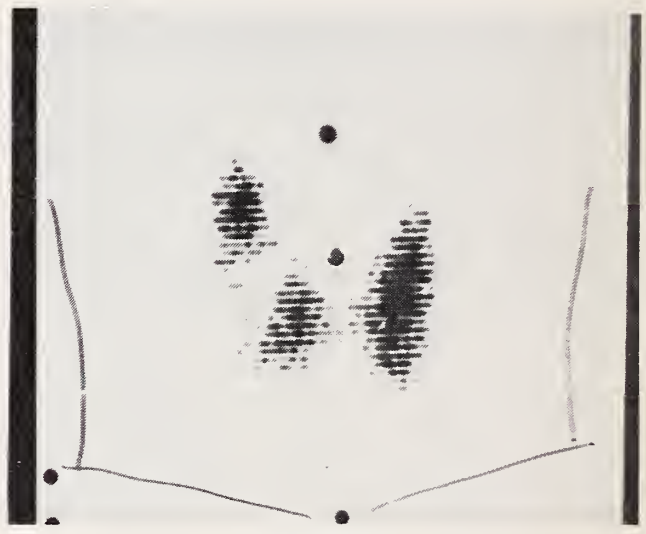

FIGURE 1

^{131}I demonstrating a 2 cm. "cold" nodule in a slightly enlarged right thyroid gland.

Dr. Bagby: I believe that thyroid antibody determination would be of value in ruling out Hashimoto's thyroiditis which may present with this appearance. I do not believe angiography would prove of much value in this particular situation.

Dr. Morlang: In this case a ^{75}Se selenomethionine scan was done. Since solid tumors will utilize protein, more than surrounding tissue, this is a method of differentiating cystic from solid masses within the thyroid gland (Figure 2).

Dr. Bagby: The area seems to take up the ^{75}Se selenomethionine indicating that it represents a solid tumor. I think that a parathyroid adenoma may do the same thing. If the ^{75}Se selenomethionine scan reveals this to be a cystic lesion, the management may be different since a cystic lesion would be a benign process.

Dr. Morlang: Because of the high probability that this represented thyroid carcinoma a hemithyroidectomy was performed, and this lesion turned out to represent a follicular adenoma of the thyroid.

Discussion

The single cold nodule in a normal-sized thyroid gland is a difficult diagnostic problem. The high

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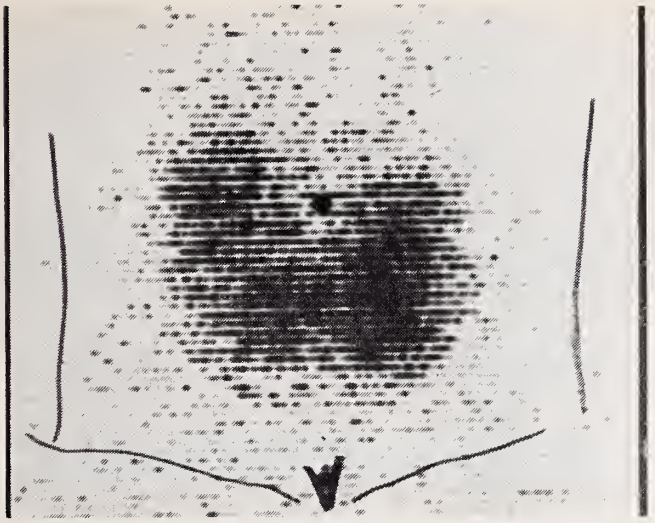

FIGURE 2

^{75}Se selenomethionine scan demonstrating uptake in the region of the cold nodule indicating that this is a solid functional lesion, rather than a cystic or nonfunctioning lesion.

resolution rectilinear scan done with ^{131}I is capable of defining lesions as small as 3-4 mm. As mentioned above, the ^{75}Se selenomethionine scan can help differentiate between cystic and solid tumors. False negative scans can be seen in cases where the solid tumor is very avascular or necrotic.

Considering the patient's age, sex and appearance of her thyroid gland, the possibility of carcinoma is at least 25 percent. For this reason, pathological diagnosis is definitely warranted.

The recommended mode of treatment is first a hemithyroidectomy with pathological examination of the cold nodule. If carcinoma is diagnosed, total thyroidectomy should be performed. This allows the diagnosis and treatment of metastatic lesions with ^{131}I, which is not possible with normally functioning thyroid tissue present.

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REFERENCES

1. Selenkov, H. A. and Karp, P. J.: An approach to the diagnosis and therapy of thyroid tumors; *Seminars in Nuclear Medicine* 1(4):461, October, 1971.

2. Weinstein, M. B.: ^{75}Se methionine as a scanning agent for the differential diagnosis of the cold thyroid nodule; *Seminars in Nuclear Medicine* 1(3):390, July, 1971.

Small Bowel Bypass for Obesity
A Discussion of Four Different Procedures

CHARLES E. WILLS, JR., M.D.,* *Washington*

SURGICAL PROCEDURES FOR OBESITY are dangerous[6, 10, 12, 16, 17, 21, 25, 29] radical methods of treatment. However, until medicine discovers other more successful means of obesity management than is available today, bypass surgery must be considered. In my opinion all physicians who have done investigative work in this field[11, 16, 18, 19, 20, 27, 31] have concluded that it may have a place in the treatment of the morbidly obese patient. This is in spite of the high mortality, high morbidity, and uncertain long term effects.

Morbid obesity has been defined as one in which patients are two to three times normal weight[18] or more than 100 pounds over normal weight[6, 11] or adiposity sufficient to cause socio-economic, reproductive or life-threatening disability in an otherwise normal person.[15]

What about patients who are overweight, but not quite considered morbidly obese? In most articles[8, 12, 13, 19, 20, 21, 25] on this subject the authors have included a few of these along with the morbidly obese cases. In this paper will be included many cases who fall into the category of less than the morbidly obese. I do not wish to imply that all of these cases should have been treated by surgery and I would like to emphasize that most physicians would not have done surgery on a few of these cases.

In spite of adverse criticism and cautious advice these cases are being performed with rapidly increasing frequency over the United States.

The experiences of early investigators[1, 6, 7, 12, 13, 14] performing jejunocolostomies (Fig. 1) demonstrated that weight losses would be successful; however, side effects and dangers led to modifications that produce high success rates with more acceptable side effects and less dangers. The Payne procedure (Fig. 3) has received more general acceptance than any other to date. More recent modifications[19, 22] (Fig. 4) have some hopes of improving the previous results and decreasing the undesirable side effects. The

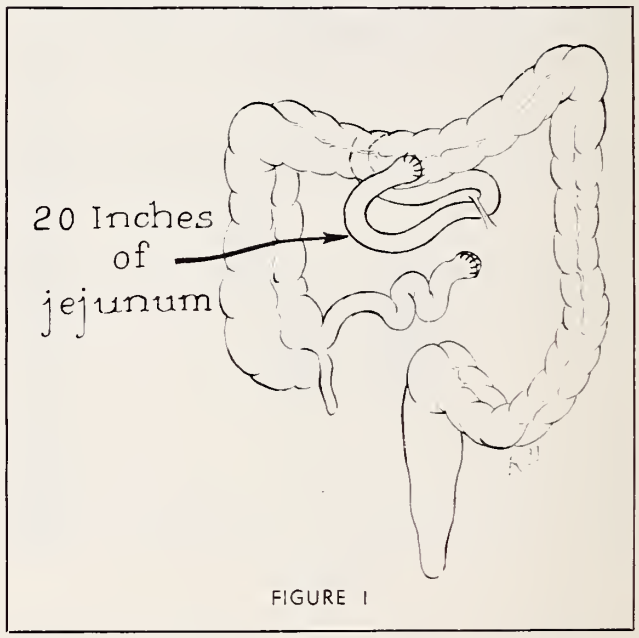

FIGURE 1

gastric bypass[20] is still another interesting surgical attack on obesity but will not be discussed in this paper.

This paper will report experiences with six different types of surgical bypasses in a total of 259 cases. An effort will be made to attempt to evaluate the results in the different types.

Types of Procedures

Six different types of bypass were performed (Table 1). In three cases 20 inches of jejunum were anastomosed end to side to the transverse colon (Fig. 1). In 12 cases 15 inches of jejunum were anastomosed end to side to the ileum, 10 inches above the ileocecal junction (Fig. 2). In two cases 15 inches of jejunum were anastomosed end to side to the ileum four inches above the ileocecal junction (Fig. 3).

In 24 cases 10 inches of jejunum were anastomosed end to end to 12 inches of terminal ileum (Fig. 4). In two cases 14 inches of jejunum were anastomosed end to end to four inches of terminal ileum. The proximal end of the terminal ileum in the end to end shunts was anastomosed end to side to the transverse colon or sigmoid colon.

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TABLE 1
TYPES OF BYPASS

	Inches of Jejunum	Inches of Ileum	No. of Cases
1. Jejunocolostomy	20	0	3
2. Jejuno-ileostomy ...	15	10	12
End to side	15	8	2
	14	4	216
3. Jejuno-ileostomy ...	10	12	24
End to end	14	4	2

In all cases the distal end of the jejunum was closed upon itself. In the first 35 cases it was left unattached. In the last 234 cases this blind pouch was plicated upon itself for four inches to prevent intussusception.

Sex, Age, and Weight Range Statistics (Table 2)

There were approximately four females for every male in the series. Ages varied from 13 years of age in the youngest to 63 years of age in the oldest. Weights before surgery ranged from 142 to 580 pounds with the average weight being 253 pounds. The 142 pound woman was very short in stature.

TABLE 2
SEX AND AGE STATISTICS

Number Female	211- 82%
Number Male	48- 18%
Total Number Cases	259-100%
Age range 13 years to 63 years	
Weight ranges and averages	
Smallest	142 pounds
Largest	580 pounds
Average	253 pounds

Results of Weight Loss

Table 3 summarizes the weight loss results. Three cases of jejunocolostomy (Fig. 1) lost an average of 115 pounds in five to nine months. One of these leveled off after 125 pounds of weight loss and then was revised to a jejuno-ileostomy 16 months after her jejunocolostomy. The second case was revised to a jejuno-ileostomy after only seven months after a weight loss of 100 pounds, due to electrolyte imbalance. The third was revised to a jejuno-ileostomy after a weight loss of 125 pounds in five months due to a multitude of problems.[26] Jejunocolostomy is no longer advised by surgeons experienced in this procedure.[25, 26]

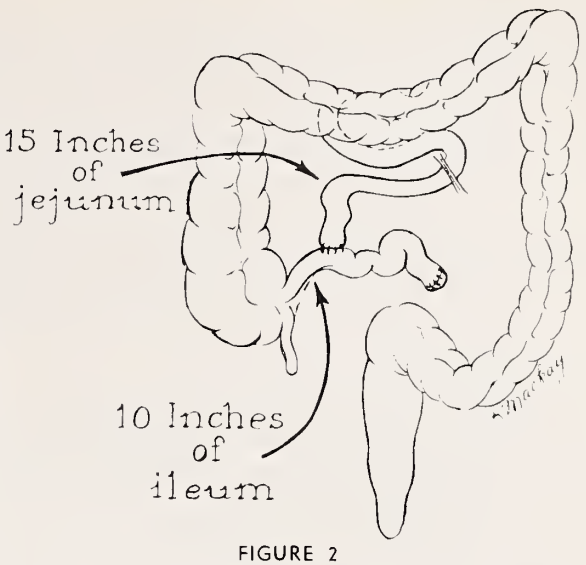

FIGURE 2

Twelve cases of jejuno-ileostomy using 15 inches of jejunum and 10 inches of terminal ileum (Fig. 2) followed three to six years had an average weight loss of 65 pounds. Further evaluation of these cases individually demonstrates excellent results in six cases, fair results in two cases and disappointing results in four cases. The number of disappointing results is too high in this type of jejuno-ileostomy.

Only 84 of 216 total cases of end to side jejuno-ileostomy using 14 inches of jejunum and four inches of terminal ileum (Fig. 3) were used in evaluation of weight loss. These cases have been observed for two to five years. The average weight loss of 80 pounds is even more impressive when the average weight before surgery is considered. The only cases not included were ones in which follow up studies were inadequate or too short.

Twenty-four cases of end to end jejuno-ileostomy using 10 inches of jejunum and 12 inches of terminal ileum (Fig. 4) have been observed from six to 10 months. My general impression at this time indicates that the success rate of weight loss and the incidence of diarrhea problems are about the same as with the

TABLE 3
RESULTS OF WEIGHT LOSS

Number Cases	Type of Bypass	Average Weight Before Bypass	Average Weight After Bypass	Average Loss	Time Time
3	Jejunocolostomy	290	175	115	5-9 months
12	Jejuno-ileostomy 15-10	271	202	69	3-6 years
84	Jejuno-ileostomy 14-4	245	165	80	2-5 years

Payne procedure (Fig. 3). The procedure is technically more difficult, takes approximately 45 minutes more operative time, and leaves more areas for surgical complications. Payne[25] and Meyerowitz[24] have successfully used the end to end jejuno-ileostomy as a revision procedure on previous end to side jejuno-ileostomy cases in whom the weight losses are unsatisfactory due to excessive regurgitation into the blind loop. I have done this nine times with a moderate degree of success.

Salmon[19] and Scott[22] have reported a higher percentage of successful weight loss with a lower incidence of diarrhea with this procedure. However, both[19, 22] agree that the follow up period is too short to draw conclusions concerning this type of jejuno-ileostomy.

Complications

1. Twenty-four cases out of 269 observed for two months to eight years have had incisional hernias.

2. Thirty-four had clinical and laboratory proven calcium deficiencies. All of these were transient. Most cases were managed with oral supplementation of calcium gluconate or calcium lactate. A few required intravenous administration. Two cases were given calcium gluconate intramuscularly in the home for a period of several months. Two cases had intractable calcium deficiencies that could not be permanently managed and had to have the bypass taken down. One suffered from psychic vomiting and could not retain oral calcium. His bypass was taken down seven months after his original surgery. The second case had her bypass taken down after 30 months. This was due to emotional conflicts and calcium deficiency. It is the author's opinion that failure in both cases was due primarily to emotional problems and secondarily due to calcium deficiency.

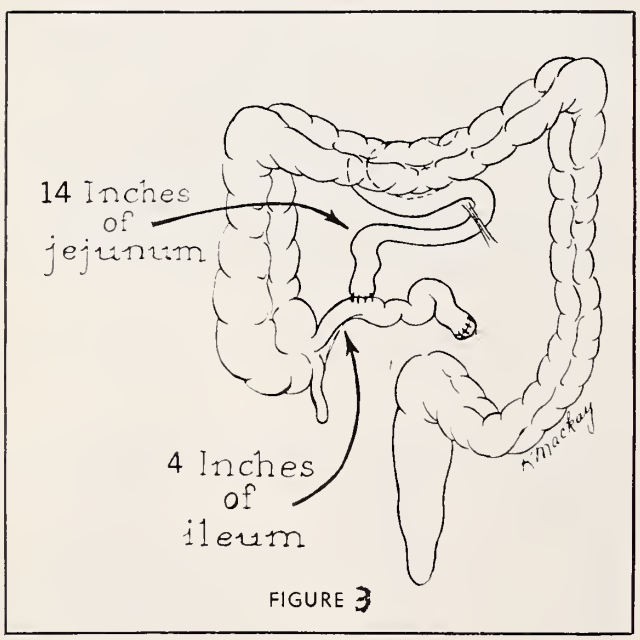

FIGURE 3

3. Fifty-three cases or 20 per cent had transient clinical and laboratory evidence of potassium deficiency. All cases were satisfactorily managed with oral or intravenous potassium administration.

4. Nine cases had intestinal obstructions after the bypass.

A. Four of these were due to intussusception of the blind jejunal pouch. All of these occurred in the first 35 cases in which the blind pouch was not plicated or attached to the mesentery. No cases have resulted in the last 224 cases in which the blind jejunal pouch was plicated.

B. Four cases were explored operatively due to band adhesions. All of these cases had multiple intestinal adhesions due to previous surgery.

C. One case had volvulus at the anastomosis site. This complication was managed at another hospital and the bypass was taken down, only after several weeks of partial obstruction and marked physical deterioration of the patient. It is the author's opinion that earlier corrective surgery could have been done without taking down the bypass. This patient has requested to have the bypass done again.

5. One case of polyethylene catheter embolus occurred when the catheter was sheared off by the needle. This lodged in the pulmonary artery. It was removed surgically without complications. Obese patients frequently have poor veins. Vena puncture was frequently accomplished by passing a polyethylene catheter through a needle placed in the subclavian or internal jugular vein (Intracath).

6. The incidence of wound infection or seratoma was 20 per cent in the first 20 cases before neomycin sulfate-phthalylsulfathiazole (neothalidine) bowel prep was instituted. With neomycin sulfate-phthalylsulfathiazole and low residue diet preparation the incidence dropped to 5 per cent. Only one case was severe enough to cause a large area of necrosis. All other cases subsided with drainage and antibiotics with minimal difficulties.

7. Diarrhea was a serious problem in two of the three cases of jejunocolostomy[26] (Fig. 1). With jejuno-ileostomy it was much less. The bypass was restored (Table 6) in two cases due to intractable diarrhea. Three months after the bypass 92 per cent reported six or less stools a day without medication. One year after bypass, 80 per cent reported four or less stools a day, 14 per cent report four to six stools a day, and 6 per cent recorded six to 12 stools a day without medication.

Mortalities

Seventeen cases (Table 4) are dead. All of these are not related to bypass surgery. I will leave it to the reader to evaluate for himself the cause and ef-

TABLE 4

TOTAL NUMBER DEAD OF ALL CAUSES

1. Massive pulmonary embolus	5
2. Venous thrombosis	1
3. Gram negative septicemia	1
4. Acute hemorrhagic pancreatitis	1
5. Acute cholecystitis with complications	1
6. Cardiac standstill at surgery	1
7. Cerebral hemorrhage	1
8. Hepatic failure due to cirrhosis	3
9. Hemorrhaging esophageal varices	1
10. Suicide	1
11. Auto accident	1
Total	17

fect relationship between these deaths and the surgery.

Five cases of massive pulmonary embolus (occurring at 8, 9, 13, 24, and 90 days postoperatively) occurred.

One case of ascending deep femoral thrombosis died 40 days postoperatively due to renal vein thrombosis and uremia.

Three cases died from hepatic failure. One of these was an alcoholic who had pathologically proven hepatic cirrhosis at the time of surgery and who continued to drink heavily. He died 24 months postoperatively. Two others died nine and 24 months postoperatively. Both cases were managed by other physicians due to living a long distance away from the surgeon.

One case (580 pounds) died four days postoperatively due to gram negative septicemia and massive coronary occlusion. Multiple abscesses of the lungs, kidneys, and liver were seen at autopsy.

One case died 48 hours postoperatively due to acute hemorrhagic pancreatitis and massive coronary occlusion.

One case developed acute cholecystitis seven days postoperatively. This was treated medically but progressed to acute pancreatitis, ascending cholangitis, hemorrhaging esophageal varices, acute thrombocytopenic purpura, lower nephron necrosis and death after 10 days.

One case died five days postoperatively due to hemorrhaging esophageal varices. Alcoholic cirrhosis of the liver was pathologically proven at the time of the bypass.

One case died of a cerebrovascular accident two months postoperatively. She was hypertensive and over 60 years of age.

One case had cardiac arrest just as the abdomen was opened. His history included coronary occlusion three years before surgery. He was resuscitated with cardiac massage and lived 10 days in a decerebrate condition and to expire from a massive pulmonary embolus.

One case committed suicide seven months postoperatively. She was a schizophrenic who had institutional psychiatric care intermittently both pre- and postoperatively. She was on leave of absence when she shot herself in the chest with a shotgun.

One case died five months postoperatively due to an automobile accident.

All cases of death were confirmed by autopsy except the cerebrovascular accident and one case of pulmonary embolus.

Metabolic Effects

1. Six cases out of 259 were insulin taking diabetics with the daily doses ranging from 20 to 60 units. The incidence of milder forms of diabetes mellitus were 75 per cent in 50 consecutive cases preoperatively when tested by glucose tolerance curves.[28] When tested by fasting blood sugars and two hour postprandial blood sugars the incidence was considerably lower.

Postoperatively all insulin taking diabetics and all other cases that were tested had normal blood sugar values without diet, diabetic tablets or insulin. This has been reported many times previously.[1, 13, 23, 26, 28]

2. Seventeen cases had kidney stones postoperatively. Of these 17, seven had had kidney stones preoperatively. The other 10 cases did not have kidney stones before the bypass. The cause and effect relationship of kidney stones to bypass surgery remains uncertain.[25, 28]

3. Cholesterol and blood lipid values markedly decrease after bypass surgery. Cholesterol values frequently decrease 100-150 mgm./100 ml. and values of 90-125 mgm./100 ml. are common. This has been previously reported.[1, 5, 8, 13, 22, 25, 27, 31]

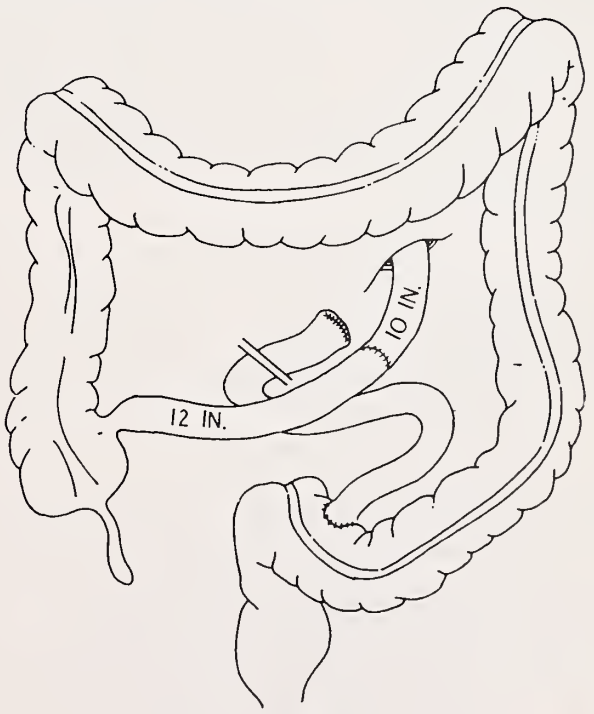

FIG. 4

4. Serum proteins frequently decrease, but rarely remain below normal values. This is especially true with serum albumin. This has been previously reported.[1, 16]

5. Uric acid commonly decreases after bypass surgery. Many cases of gouty arthritis have markedly improved clinically.[16, 28]

6. Liver biopsies were not done routinely at surgery if the liver looked normal in cases #1-#159. If it appeared abnormal liver biopsies were done.

Liver biopsies were done routinely in every case from case #160-#259 at the time of bypass; 44 per cent of these had pathological fatty metamorphosis and 56 per cent had normal biopsies.

Postoperatively 109 biopsies were done on 74 cases 3-87 months postoperatively; 66 per cent of these were unchanged comparing the preoperative and postoperative state. In 36 biopsies a normal appearing liver at surgery had fatty metamorphosis by biopsy postoperatively. In five biopsies preoperative biopsies of fatty metamorphosis changed to normal biopsies postoperatively.

Fifty-three of the postoperative biopsies were over 24 months' time after the bypass. Fifty-six per cent of these were normal biopsies and 44 per cent demonstrated fatty metamorphosis. It is interesting that this percentage is exactly the same as the preoperative percentage.

In one case a normal appearing liver at surgery changed to cirrhosis (see notations in deaths in this article).

In one case a preoperative biopsy of fatty metamorphosis changed to cirrhosis (see notation in deaths in this article).

Shibata,[9] Juhl,[4] and Salmon[19] reported extensive pre- and postoperative studies on the liver of bypass cases. They found frequent fatty changes but no evidence of cirrhosis following intestinal bypass surgery for obesity.

Psychological Effects

In general the results are psychologically beneficial but not in all cases. Some seem worse. I evaluated all patients emotionally before surgery but did not eliminate any cases on this basis. A large number of people who have benefitted greatly from this bypass would have been denied this surgery. Emotional instability is much higher in obese cases than in average people. In my experience I am not able to predict the postoperative emotional attitude of my cases on the basis of preoperative evaluation.

Several surgeons[21, 22, 25] have attempted to eliminate some patients after psychological evaluation. Payne,[25] Morgan,[15] Salmon,[19] Weissman,[37] and Jenson,[27] all reported improvement psychologically after bypass surgery.

Arthritis

Eighteen of my cases have had arthritis postoperatively, who did not have symptoms preoperatively. It is generally migratory and inflammatory with hot swollen joints. Usually sedimentation rates and rheumatoid flocculation tests are negative. Generally they all get well with aspirin and time. Two of them had subcutaneous nodules with biopsy findings consistent with erythema nodosum. One case with severe rheumatoid arthritis preoperatively developed an hemorrhaging peptic ulcer after cortisone therapy and the bypass had to be taken down. The cause and effect relationship of the bypass to arthritis remains uncertain.

Shagrin, et al.[3] reported seven cases of arthritis out of 31 bypass cases. Most of these bypasses were jejunocolostomies.

Potter[2] reported similar symptoms in a case of extensive jejuno-ileal resection due to volvulus.

Pregnancy

Eight cases have had 10 term pregnancies and delivered normal babies. One additional one delivered twins at 36 weeks gestation. Other than prematurity they appeared normal. One twin was found dead in bed unexpectedly at age nine weeks.

Payne[1] and Barrow[21] have reported successful pregnancies after bypass surgery.

As reported previously[30] bypass cases can be advised to become pregnant. The obstetrician should be familiar with problems that may be encountered with bypass cases.

The Bypass Taken Down

The surgical bypass will not be satisfactory for all obesity cases (Table 5). A certain number of patients will not accommodate to the new metabolic state and side effects. Obesity cases in general are impetuous. They are not willing to accept side effects and become depressed if weight loss is not rapid.

TABLE 5
BYPASS RESTORED

	Number of Cases
1. Intractable calcium deficiency	2
2. Intractable diarrhea	2
3. Failure to adjust emotionally	5
4. Psychic vomiting	1
5. Other	5
Total	15

TABLE 6
IDEAL CRITERIA FOR PATIENT SELECTION

1. **Repeated failure to control weight by diet.**
2. **Under age 50 and over age 12.**
3. **Emotionally stable.**
4. **Weight is or has been 75 pounds over normal weight values.**
5. **Economic status sufficient to allow for disability and complications.**
6. **Intelligence sufficient to accommodate to the bypass state.**

Some failures are related to economic failures in treating complications; others to intellectual or emotional inability to carry out the management of the side effects and complications.

Patient Selections

Table 6 lists the ideal criteria for patient selection. I have not followed this with the patients in this report. If this is strictly adhered to very few persons would qualify. In my experience the younger patients do better than older patients. Probably age 60 should be the absolute maximal age. I have been unable to predict results with emotional instability. This is very common with obese patients. Many respond excellently to bypass surgery; others do not. I try to point this fact out to unstable patients preoperatively. Adequate economic and intellectual status is essential since bypass does require enough intelligence to control the side effects such as diarrhea and rectal irritation and to recognize symptoms of electrolyte imbalance. Without economic reserve the patient may not be able to afford medicine, hospitalization and lack of income that is frequently needed for several months postoperatively.

Comment

Liver functions are of utmost concern following bypass surgery. Long term follow up with frequent checking of liver function tests and general well being is necessary. Two cases who were not cirrhotic before bypass died with cirrhosis. Neither of these cases returned for adequate postoperative checkups. Both reported severe nausea and inability to eat for several months. In four instances I have treated cases with similar symptoms and impaired liver function tests with hyperalimentation with dramatic symptomatic, clinical, and laboratory improvement. I feel that I may have prevented cirrhosis in these cases. Payne[25] recommended re-establishment of intestinal continuity in the presence of signs or symptoms of impending liver failure.

Three of my cases had cirrhosis before the bypass. One case has done excellently for four years. One died of hemorrhaging esophageal varices. One died due to hepatic failure (see deaths in this article).

Six different types of bypass were used in this paper. From my results, the Payne procedure (Fig. 3) is the procedure of choice; however, results with end to end jejuno-ileostomies (Fig. 4) may prove superior after longer observation.

My experience with the very young is small; however, all have done unusually well. They were 13, 13, 14, and 17 years of age. It has impressed me that this is the ideal age to have it done.

Weight loss is difficult to evaluate statistically. In general terms my cases have returned to normal weight values 30 per cent of the time. An additional 50 per cent to 60 per cent lost enough weight to consider the procedure worthwhile. Disappointing results were obtained in 10 per cent to 20 per cent of the cases depending on where the evaluating line is drawn. Even the disappointing weight losses were not always considered failures because the bypass stopped further weight gains and in some instances the preoperative weight was considerably below maximum previous weight values due to weight reduction programs. In the latter cases less weight reduction should be expected.[28]

The usual signs of intestinal obstruction may not be seen clinically. Lack of abdominal distension may occur when the blind loop obstructs due to band adhesions or intussusception. This must be considered when bypass cases are seen with abdominal pain.

The metabolic effects on blood sugar, lipids, and uric acid suggests benefits in disorders related to these tests.

Prophylactic antibiotics might have prevented death in the 580 pound man who died from gram negative septicemia. Antibiotics were not given routinely.

Early surgical intervention might have prevented the death due to acute cholecystitis.

Leg exercises and early ambulation are being used more vigorously to prevent pulmonary embolus. During the past 10 months Moretz* vena cava clips have been placed on 32 cases prophylactically. No cases of pulmonary embolus have occurred but the number of cases is too small and the period of time too short to draw conclusions on this idea.

Conclusions

1. Eliminating extremes of age, cases of cirrhosis and alcoholics may improve mortality rates.

2. Long term postoperative follow up and management is essential. Careful observation of liver function periodically postoperatively may detect liver damage early. Intravenous feeding as hyperalimenta-

*Moretz teflon vena cava clip, Jobst, Toledo, Ohio.

tion or taking down the bypass may prevent cirrhosis.

3. Jejunocolostomy for obesity should probably never be done.

4. Plication of the distal blind end of the jejunum is essential to prevent intussusception.

5. Preoperative bowel preparations with a low residue diet and neomycin sulfate-phthalylsulfathiazole is indicated.

6. Until better methods of patient selection is available very few obesity cases should be denied bypass surgery because of unstable emotional systems.

7. Pregnancy can be advised after bypass surgery.

8. The cause and effect relationship between the bypass and kidney stones and arthritis remains uncertain.

Summary

Two hundred and fifty-nine cases of intestinal bypass surgery done by six different methods are presented. Successes, failures, complications, mortalities, and metabolic effects were discussed. An attempt was made to compare the results and effects in the different surgical methods.

Due to the lack of a successful medical treatment for obesity, surgical techniques may be used if these benefits seem to outweigh the dangers.

Bypass surgery is dangerous and radical approach to obesity, however recalcitrant, obesity is also a malignant disease. Long term follow up management is essential.

More investigation and longer follow up periods are needed to adequately evaluate surgical bypass.

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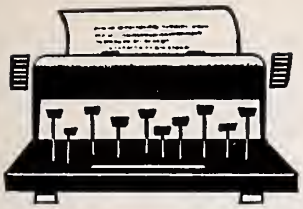
REFERENCES

1. Payne, J. H.: Metabolic observations in patients with jejunocolic shunts; *Am. J. Surg.* 106:273, 1963.
2. Potter, H. P., Jr., and Bassett, D. R.: Extensive jejunoileal resection; *Penn. Med.* 69:27-30, 1966.
3. Shagrin, J. W. et al.: Polyarthritis in obese patients with intestinal bypass; *Ann. Int. Med.* 75:377-380, 1971.
4. Juhl, Erik et al.: Liver morphology and biochemistry in eight obese patients treated with jejuno-ileal anastomosis; *New Eng. J. M.* 285:543-547, 1971.
5. Buckwald, H.: Ileal bypass in patients with hypercholesteremia or arteriosclerosis; *JAMA* 196:119, 1966.
6. Troncelliti, M. A.: Ileal bypass-surgical relief of intractable obesity; *Hospital Topics* 117, 1966.
7. Page, I. H.: Short-circuiting of the small intestine; *JAMA* 182:77-79, 1962.
8. Lewis, L. A., Turnbull, R. B., Jr. and Page, I. H.: Effects of jejunocolic shunt for obesity, serum lipoprotein, lipids and electrolytes; *Arch. Int. Med.* 117:4-16, 1966.
9. Shibata, S. P. et al.: Morphologic changes of the liver following small intestinal bypass for obesity; *Arch. Surg.* 103:229-237, 1971.
10. Kaufmann, Herbert J. and Weldon, Harvey W.: Intussusception—A late complication of small-bowel bypass for obesity; *JAMA* 202:87-88, 1967.
11. DeWind, Loren T. and Payne, J. H.: Morbidly obese may benefit from intestinal bypass; *JAMA* 200:41-42, 1967.
12. Bonder, George F. and Pisisky, Walter: Complications of small intestinal short circuiting for obesity; *Arch. Surg.* 94:707-716, 1967.
13. Shibata, Henry R. et al.: Metabolic effects of controlled jejuno-colic bypass; *Arch. Surg.* 95:413-428, 1967.
14. Jackson, Daniel and Bernard, Lynn A.: Obesity: Medical and surgical management; *Medical Record and Annals* 60:145-148, 1967.
15. Morgan, Alfred P. and Moore, Francis D.: Jejunoileostomy for extreme obesity; *Ann. Surg.* 166:75-82, 1967.
16. Wills, Charles E., Jr.: Experiences with intestinal short circuiting procedures for obesity; *JMAG* 365-371 (Sept.) 1967.
17. Demuth, W. E., Jr. and Rottenstein, H. S.: Death associated with hypocalcemia after small bowel short circuiting; *New Eng. J. Med.* 270:1239-1240, 1964.
18. Scott, H. William, Law, David H., IV, Saudstead, Harold H., Lanier, Verne C., Jr. and Younger, Rachel K.: Jejunoileal shunt in surgical treatment of morbid obesity; *Ann. Surg.* 171:770-782 (May) 1970.
19. Salmon, Peter A.: The results of small intestine bypass operation for the treatment of obesity; *Surg. Gynec., and Obst.* 132:965-979 (June) 1971.
20. Mason, Edward E. and Ito, Chikashi: Gastric bypass; *Ann. Surg.* 170:329-336 (Sept.) 1969.
21. Barrow, J., Frame, B. and Bozalis, J. R.: A shunt operation for obesity; *Diseases of the Colon and Rectum* 12: 115-119, 1969.
22. Scott, H. William et al.: Experience with a new technique of intestinal bypass in the treatment of morbid obesity; *Ann. Surg.* 174:560-572, 1971.
23. Rehfeld, J. F.: The intestinal insulinotropic action after jejunoileostomy; *Scand. J. Gastroent* 5:77-80, 1970.
24. Meyerowitz, B. R.: Intestine bypass for obesity; *JAMA* 218:598, 1971.
25. Payne, J. H. and DeWind, L. T.: Surgical treatment of obesity; *Am. J. Surg.* 118:141-147, 1969.
26. Wills, C. E., Jr.: Jejunocolostomy for obesity; *MSMJ* 19:45-50, 1970.
27. Jensen, Hans-Eric: Jejunoileostomy for obesity; *Acta Chir. Scand. Suppl.* 396:98-105, 1969.
28. Wills, C. E., Jr.: Jejunoileostomy for obesity; *JMAG* 58:456-461 (Nov.) 1969.
29. Baden, H. et al.: Intussusception after shunt operation for obesity; *Nordick Medicin* 85:468-469, 1971.
30. Wills, C. E., Jr.: Obstetrical delivery after jejunoileostomy for obesity; *JMAG* 60:38-42 (Feb.) 1971.
31. Scott, H. W., Jr. and Law, D. H.: Clinical appraisal of jejunoileal shunt in patients with morbid obesity; *Am. J. Surg.* 117:246-253, 1969.



Physician's Assistants in Georgia

OBVIOUSLY, THE CONCEPT OF AN ASSISTANT to a physician and delegation of tasks by a physician to other individuals, is not new. Undoubtedly, some kinds of tasks have been delegated since the priest-physician concept was developed thousands of years ago.

According to Dr. Malcolm Todd, Chairman of the Council on Health Manpower of the AMA, what *is* new "is the desire to formalize training within University medical centers to enable a new category of personnel to perform services which extend the physician's capabilities in the diagnostic and therapeutic management of patients."

Perhaps the first formal beginnings of the present day physician's assistant educational programs began in 1962 in the mind of Dr. Eugene A. Stead, Jr., then Chairman of the Department of Medicine at Duke University. This developed into an inaugural program in 1965, under Dr. Stead's direction.

Subsequently, a different approach toward the same end was begun under the direction of Dr. Richard Smith at the University of Washington, in collaboration with the Washington State Medical Society, in development of the MEDEX program. This concept, and Duke's approach, have spread over the nation in a variety of settings. Nevertheless, in spite of the beginning of numerous programs, as of the end of the calendar year 1971, there were only 184 graduates from all programs.

Definition

The AMA-accepted definition of a physician's assistant is as follows:

"The physician's assistant is a skilled person qualified by academic and practical training to provide patient services under the supervision and direction of a licensed physician who is responsible for the performance of that assistant."

At least two ways of categorizing physician's assistants have developed. In 1970, the National Academy of Sciences described three types: A, B, and C. The report distinguishes the type A assistant from B and C by his ability to integrate and interpret medical findings on the basis of general medical knowledge and to exercise a degree of independent judgment. B-type assistants would function perhaps as deeply, but in more narrowly defined areas, such as specialty physician's assistants, and would utilize a lesser degree of independent judgment. C-type assistants would be more on-the-job trained individuals, taught to use specific skills in specific duties. These individuals would use no degree of independent judgment in the care of patients.

Another way of characterizing physician's assistants would be to differentiate between assistants to the primary care physician, as distinguished from medical specialty assistants, such as Pediatric Assistants, Orthopedic Assistants, Urologic Assistants, etc.

Studies throughout the nation have indicated generally that acceptance by patients and physicians of physician's assistants and their duties has been good. Numerous editorial and philosophical debates have raged regarding the appropriateness of certain types of tasks delegated to physician's assistants, but nevertheless, studies and case reports of actual work by physician's assistants have shown that

acceptance has been good, and that medical care has been satisfactory. Furthermore, most of the studies reveal that utilization of a physician's assistant by a physician can increase the amount of free time or the number of patients seen by approximately 50 per cent.

Legislation

Legislation throughout various states in the past two or three years has been active in this area. Three approaches have been utilized singly or in combination in at least half of the United States. These approaches are (1) providing an exception to the State Medical Practice Act which allows the physician legally to delegate routine patient care functions to qualified non-physicians; (2) empowering the State Board of Medical Examiners to approve training programs for physician's assistants; (3) authorizing or approving a physician to use one or more physician's assistants in his practice. Georgia has utilized all three approaches in its legislation, passed during the latest General Assembly, in March, 1972. These laws were originated as House Bills 1591 and 1592, and had considerable input from the Medical Association of Georgia in their construction.

Basically, as it relates to the physician's assistant, the first House Bill excepts from the legal practice of medicine in Georgia those tasks performed by a physician's assistant when delegated by a licensed physician in Georgia and when those tasks have been approved by the Composite Board of Medical Examiners. The second sets out to provide the mechanism to fulfill the objectives of the first. Specifically, written into the Act under the section entitled "Purpose," the Act states in part ". . . to alleviate the growing shortage and geographic maldistribution of health care services in Georgia, the General Assembly intends, by this Act, to establish a new category of health care, assistants to physicians, . . ." and goes on to say that this Act is ". . . intended to encourage the more effective utilization of the skills of physicians by enabling them to delegate health care tasks to such assistants where such delegation is consistent with the patient's health and welfare. Toward this end, the General Assembly hereby intends to remove legal constraints which presently constitute unnecessary hinderances to the more effective delivery of health care services."

Define Duties

At the last MAG annual session in Macon, the chairman of the Education Committee was asked to appoint a Task Force to work with the Composite Board of Medical Examiners to define physician's assistants' duties. This Task Force consists of Robert Jewett, M.D., Emory University School of Medicine; Robert Reynolds, M.D., Medical College of Georgia and J. Rhodes Haverty, M.D., Georgia State University. These physicians, along with other interested physicians and staff of the MAG Headquarters office, have been meeting with a committee of the State Board in the development of principles guiding the implementation of the above two Acts.

The first obvious evidence of these meetings was in the form of a letter coming over Cecil Clifton's signature, dated June 12, 1972, to all physicians in Georgia. This letter explained certain aspects of the laws, and certain general plans of the Board concerning the application process for the physician's assistants. Further work and meetings have taken place since the drafting of that letter.

Under the law, the Board must appoint an "evaluation agency" to recommend to the Board the proposed physician's assistant's qualifications to perform the tasks described in the job description, as submitted by the applying and employing physician. This "evaluation agency" has been designated by the Board to be the above three named physicians.

Testing Procedures

Presently it is the intent to accept for application all graduates of the previous, ongoing, and/or planned Physician's Assistants programs at Emory University School of Medicine, the Medical College of Georgia, and Georgia State University, without additional testing of the proposed physician's assistant. All other applications will involve both written and practical examinations of the proposed physician's assistant. A written examination presently is being prepared, probably along the lines of the National Board of Medical Examiners Part III, and probably will take four to eight hours for completion. The practical examination presently planned probably will take approximately one-half day, and will include supervision of the applicant by clinicians in actual patient settings.

Although the cost of the application itself to the Composite Board of Medical Examiners has been set at a $50.00 fee, the cost of the evaluation (testing) of the applicants who have not graduated from approved programs has not been set, but will have to be sufficient to cover the costs of the examinations themselves. This figure is not likely to be less than $200.00.

It is anticipated at present that this testing procedure will continue for those who have not graduated from Board-approved programs for approximately two years. After that time, it is anticipated that no applications will be accepted for physician's assistants who have not graduated from a Board-approved educational program for physician's assistants. It will be the responsibility of the "evaluation agency" to recommend to the Board those programs which produce acceptable graduates for the physician-employers in the State of Georgia. Applications for physicians who wish to employ physician's assistants are being readied by the Composite Board of Medical Examiners, and should be available shortly.

Accreditation and Certification

The AMA has begun accrediting programs for the education of physician's assistants throughout the United States. It is anticipated that a published list of those approved programs will be available yearly from the offices of the AMA.

In addition, the AMA has recently announced, in conjunction with the National Board of Medical Examiners, a national project leading to the certification of physician's assistants. Nationally validated certifying examinations that will insure the orderly development of the concept of the assistant to the primary care physician will be developed over the next 18 months, and undoubtedly will play an important role in the formation of a Certifying Board, as well as national and state organizations of physician's assistants.

Many problems remain yet to be approached and solved. A recent House of Delegates of the AMA action (A-72) states that "it be the policy of the AMA that a physician's assistant not function in that capacity when an employee of and paid by a hospital or by a full-time salaried hospital-based physician." The laws of Georgia presently state that a physician employed by the State Health Department or by any institution thereof who does not normally provide health care to patients shall not be authorized to apply for or utilize the services of any physician's assistant. This present Georgia law also does not provide for a physician's assistant to work for and be delegated tasks by more than a single physician. These and other problems that will become evident will have to be resolved in the future by refinement of the law, and by regulations of the Board.

Undoubtedly, difficulties will arise. Confusion does and will continue to exist in many areas related to this subject. The Medical Association of Georgia and the Composite Board of Medical Examiners stand ready to help answer questions and attempt to solve problems as they are brought to light. It is sincerely hoped that this new opportunity for rendering patient care to the citizens of Georgia, and of the nation, will result in a betterment of the public health and more acceptable, accessible, and available health care services of good quality to our population.

John Rhodes Haverty, M.D.

Treat a Burn—Have a Plan

TECHNICS FOR THE INITIAL MANAGEMENT of the burn patient are multiple and any one of the six described by physicians familiar with burns have proven satisfactory. Simultaneously, certain stumbling blocks remain.

The admission of a burn patient to an emergency room immediately creates an index to his attending physician to carry out a plan.

Where do we fault? It may be in failing to take a close look at the patient who could have multiple associated injuries. As in other patients with trauma, and especially in the burn whose surface area involvement is over 20 percent, gastric dilatation is almost always present. Ignorance of its existence complicates therapy.

The injudicious use of narcotics, analgesics and various and sundry other medications so frequently used for relaxation can easily obscure early vascular insufficiency, associated trauma, the restlessness of anoxia, and only serve to compound the problem of the shock phase.

Ideal therapy is rapid, immediate treatment with intravenous fluids and if the initial resuscitation is deemed to be less than satisfactory, the addition of bicarbonate to the IV fluids. Bicarbonate intravenously is an asset also in all patients who have been subjected to electrical injury with or without additional thermal burns from clothing worn when injured.

Only rarely is immediate attention to the burn wound itself necessary. This can always be done later when other problems are either reduced or controlled.

Pat C. Shea, Jr., M.D.

THE CURRENT STATE OF THE FOUNDATION

Your Georgia Medical Care Foundation has now been in operation for 18 months. During this period of time we have undoubtedly made some mistakes as do all new organizations, and for these your Board of Directors humbly apologizes. However, during this time we have made great strides in developing the potential that is present when doctors work together for the benefit of their patients.

The Foundation remains as medicine's most daring and courageous attempt to re-establish public credibility in our profession, to actually improve the quality of medical care, to reduce physician liability exposure, to establish a method of looking critically at the expenditure of health dollars, to maintain postgraduate educational levels in the physician population and to provide access into the health care system.

We currently have renewed our contract with the State Department of Human Resources to continue our activity in the Medicaid program.

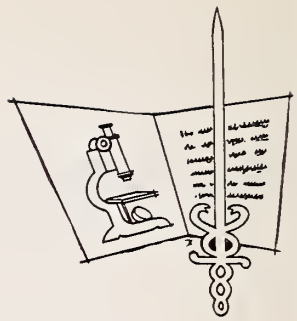
We are working actively with the "Blues."

We are working actively with the private insurance carriers and the HIC standard form has been accepted by all major carriers for your use.

The Foundation Board serves as the advisory Board of the EMCRO Project.

These are the things we are currently doing. Other projects are "in the wind" and as soon as they are more definitive we will inform you of them on this page.

F. W. Dowda, M.D.
President, Medical Association of Ga.



THE USE OF PARAMEDICAL PERSONNEL IN CANCER CONTROL

JOHN P. WILSON, M.D., *Atlanta*

THE USE OF PARAMEDICAL PERSONNEL to carry out many functions traditionally that of the physician is both desirable and inevitable. With the expanding demands for health care and the technological developments, as well as the advances in medical knowledge, it is impossible for the medical profession to attempt to maintain the traditional all encompassing role it has previously occupied.

In the area of prophylactic or preventative medicine, where screening procedures may be extensively employed, the use of paramedical personnel is particularly suitable. The use of non-physician personnel, problem oriented data and cybernetic capabilities can enable a much more effective delivery of health care.

Cancer control today is an area in which prophylactic detection procedures can be most useful. Because of the two basic principles, (1) that early cancer is essentially a silent disease and, (2) that curability is directly related to early detection and treatment, the emphasis in cancer control has been on public education, routine examinations, Pap smears, breast self-examination and proctosigmoidoscopy in asymptomatic patients.

It is increasingly more apparent that "cancer detection procedures for everyone" cannot be accomplished without the extensive use of personnel other than physicians.

The use of nurses, for example, to take Pap smears is becoming a fairly widespread practice. There is no longer a question regarding the capability of the adequately trained nurse to take an adequate Pap smear. The question now, because of the obvious desirability of a concomitant pelvic examination, is whether and how the nurse should be trained to also do a pelvic examination.

Plans have already been developed for screening clinics for breast cancer which will employ technicians, not only to carry out mammography, xerography and thermography, but also to do the initial screening by palpation.

One source of complaint that has arisen from the American Cancer Society criteria for adequate cancer examination has been the practical difficulty in providing proctosigmoidoscopy for every patient. There is little doubt that properly trained and experienced non-physician personnel can carry out adequate and safe screening proctosigmoidoscopy.

Observation of the development of medical technicians over the past two decades is proof enough that many procedures in medical care require not in-depth education but technical clinical experience to acquire proficiency.

One other factor recommends the use of paramedical personnel in the field of cancer control. The "Reach to Recovery Program" for the post-mastectomy patient was generally greeted with coolness by the medical profession, initially. Now those physicians and patients who have become involved in it have almost universally praised it, frequently with surprise in its effectiveness. For the first

time, the post-mastectomy patient has not just the mechanical instructions, but an instructor, demonstrator, advisor and confidante who has the time and interest to truly help her "Reach to Recovery."

This, then, is a major factor and a factor which applies throughout the use of properly trained and instructed paramedical personnel. The more seemingly menial tasks may frequently be done better by a less extensively trained person. It has a higher priority in importance. To the physician, postoperative mastectomy instruction may be less important than many other demands on his time; to the volunteer it is all important.

The major immediate problem in the utilization of paramedical personnel is the determination of the scope and limitation of the role of each group. Quality control must be assured by basic educational standards, required continuing education and a feed-back system for evaluation of quality and effectiveness.

Effective utilization of paramedical personnel is a necessary factor in providing adequate health care and can only be accomplished with the interest, effort and cooperation of physicians.

340 Boulevard, N.E.

SHY-DRAGER SYNDROME

EVAN B. WEISMAN, M.D., *Marietta*

THE REGULATION OF BLOOD PRESSURE in the erect posture involves a complex interplay of factors both neural and humoral. The pressure sensitive stretch receptors of the carotid sinus and aortic arch are immediately stimulated by the fall in blood pressure associated with standing upright and within 30 to 45 seconds, blood pressure returns to normal levels. The primary baroreceptor mechanism is aided by secondary factors such as increase in level of catecholamines, renin and aldosterone. If compensatory mechanisms do not come into play, physiological postural hypotension becomes prolonged; *pathological* orthostatic hypotension occurs and the person may faint.

This pathological state may be secondary to several underlying conditions. The most common include diabetes mellitus, tabes dorsalis, Addison's disease, syringomyelia and overzealous administration of diuretics or beta adrenergic blocking agents. When no underlying disease can be found, the condition is termed idiopathic.

Idiopathic postural hypotension had been recognized for 35 years when in 1960 Shy and Drager suggested that this might represent a primary degenerative disease of the nervous system. They reported widespread pathological lesions in the nervous system noted during an autopsy of one of their patients. Later reports have strengthened the contention that this indeed represents a primary degenerative neurological disease. This has led to the conclusion that the Shy-Drager syndrome is a subacute presenile degenerative disease of the nervous system in which a single cell group, or a combination of several cell groups, undergoes a selective atrophy, simultaneously or consecutively.

The disease affects men four times more frequently than women and usually occurs between the ages of 40 and 70. *Autonomic* nervous dysfunction tends to dominate the clinical picture, at least initially. This is manifested by impotence, orthostatic hypotension, anhydrosis, and bladder and bowel dysfunction. The postural hypotension is unaccompanied by a rise in the pulse rate, a distinguishing characteristic of this disorder.

In a sizable, though not accurately identified, number of patients, the disease proceeds to affect somatic in addition to autonomic neural structures. Rarely, somatic neurological defects may actually precede autonomic involvement. Most conspicuous and often most disabling is a Parkinson syndrome. Other manifestations referable to a disorder of the extrapyramidal and pyramidal tracts, lower motor neurones and cerebellum result in weakness, muscle wasting, invalidism and mental deterioration.

Therapy is on the whole very unsatisfactory. Vasopressors such as ephedrine are helpful in very mild cases. Drugs causing volume expansion, in particular the mineralocorticoid, 9 alpha fludrocortisone (Florinef) have been reported to be more useful. This medication may be supplemented with increased salt intake but caution must be exercised to prevent the onset of heart failure, edema, supine hypertension and hypokalemia. This is particularly important when high doses are employed.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

In severe cases the only method of treatment is the use of a counter pressure garment or G-suit. Use of this garment produces an effect similar to waist-high immersion in water, a mechanism known to prevent postural hypotension. Unfortunately, in practice these suits are very uncomfortable to wear. Elastic stockings, although more comfortable, are considerably less effective.

The prognosis is not good, with death occurring an average of four years after onset of neurological symptoms. Although these people are often of a relatively advanced age, with an average age of onset of 60, they clearly die earlier than a comparable general population.

638 Church Street

ON PRESCRIBING ETHICAL DRUGS

J. WINSTON HUFF, *Atlanta**

THE OUTPOURING of new ethical drugs since World War II has been a blessing and a burden for the physician. The blessing to the physician (and to his patient) is obvious. The burden is obvious to the physician, but quite often not at all obvious to the patient and to the public at large.

The number of malpractice suits against physicians has increased greatly in the past few years. Many of these cases involved claimed adverse reactions resulting from the prescribing of ethical drugs. The purpose of this article is to set forth briefly the various factors which the courts have considered important in determining whether the physician was or was not at fault. These comments relate only to those drugs which are legally available on the prescription of a qualified medical doctor.

It is true that the manufacturer of any drug is under a duty to give proper and sufficient warning of its effects and potential hazards. Most of the reported cases now say that in the case of an ethical drug (as distinguished from an over-the-counter product) this duty is fulfilled when the warning is given to the physician alone. The reasoning of these cases is that since the patient cannot purchase the drug without a prescription and would not have the technical knowledge to evaluate such warning, the drug manufacturer's duty ends with the warning to the physician. Thus in general the manufacturer of an ethical drug, assuming proper and uncontaminated manufacture, is protected if it has taken adequate steps to warn the physician of its possible dangers. The result is that the physician is held responsible to keep abreast of the flood of information concerning the properties, indications, contraindications, precautions, warnings and reactions involving the many drugs he prescribes. Listed below are factors which courts have considered in determining whether the physician has carried this responsibility. No single case referred to all these tests for the physician's awareness of the properties of a particular drug. Yet all become important if a lawsuit should result:

1. The patient's history and condition. Was this patient likely to experience adverse effects from the drug?

2. The physician's past experience with the drug when administered to other patients.

3. Was the drug available during the time the physician was in medical school? Was it discussed there and was the medical student made aware of its possible dangers?

4. The Physicians' Desk Reference. Was it consulted and were possible side effects reported there?

5. If the physician received samples of the drug, was there accompanying literature describing possible hazards?

6. Was the drug ever reported upon in medical journals and other medical literature, and did the physician read them?

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* *Prepared at the request of The Medical Association of Georgia. Mr. Huff is a partner in the firm of Powell, Goldstein, Frazer & Murphy, General Counsel to the Association.*

7. Does the physician attend medical meetings and seminars, and was the drug discussed there?

8. Did the physician take notice of advertisements for the drug in medical and trade journals in which possible adverse effects were reported?

9. Are there AMA research committee reports, and did the physician read them?

10. Did the physician receive literature from the manufacturer, including form letters, booklets and the like?

11. Did the physician read the insert in packages of the product giving notice of possible dangers?

12. Is the physician aware of any governmental action or reports concerning the drug?

13. What was said to the physician by the detail man selling the drug?

The responsibility is heavy and places a physician in a peculiar bind. If he says he was not aware of the adverse effects of a drug as reported in one or more of the above ways, he can be held liable for failure to keep abreast of medical knowledge and for failure to exercise reasonable care in prescribing it. If he is aware of such possible side effects, but still feels that the drug is necessary in a particular case, he might be held liable for prescribing a drug with well known adverse effects. This also places the physician in an unfortunate position as a defendant. Where both the physician and the manufacturer are sued, and the physician admits he received the usual warnings, generally the manufacturer will be dismissed as a defendant leaving the doctor to fight the case alone.

If the physician is aware of the drug's hazards and exercises reasonable medical judgment according to the prevailing standard of medical knowledge, he should not be held liable.

Eleventh Floor
C&S Bank Building

THE ASSOCIATION

NEW MEMBERS

Atwater, John S., Jr. Fulton—DE-4—I	P. O. Box 941 Blytheville, Ark. 72315
Bloodworth, Ronald C. Cobb—Active—P	3188 Atlanta Street, S. E. Smyrna, Georgia 30080
Clemons, Thurman Ogeechee River—Active—FP	501 Northside Dr. West Statesboro, Georgia 30458
Ferrier, Frank L. Cobb—Active—TS	737 Campbell Hill Street Marietta, Georgia 30060
Frazier, Wesley T. Fulton—Active—Anes	1365 Clifton Rd., N. E. Atlanta, Georgia 30322
Gladson, James E. Active—Fulton—I	849 E. Battle Creek Rd. Jonesboro, Georgia 30236
Hemos, G. P. de Active—Cobb—P	3188 Atlanta St., S. E. Smyrna, Georgia 30080
Jones, Charles L. Active—Hall—Pd	274 Enota Drive, N. E. Gainesville, Georgia 30501
McFadden, I. J., II Active—Fulton—P	1365 Clifton Road, N. E. Atlanta, Georgia 30322
Reich, George A. Active—Service—PH	Peachtree Seventh Building Atlanta, Georgia 30323
Sanders, Gerald E. Active—Fulton—OPH	1275 Cleveland Ave. East Point, Georgia 30344
Shehee, Walter H. Active—Fulton—P	1338 Cleveland Ave. East Point, Georgia 30344
Thomas, Kenneth E. Active—Fulton—Su	1175 Peachtree Street, N. E. Atlanta, Georgia 30309
Williams, Jack G. Active—Tift—Pd	714 East 18th Street Tifton, Georgia 31794

PERSONALS

Fifth District

A. J. Crumbley, East Point, has been elected Chief of Staff for South Fulton Hospital for the 1972-73 fiscal year.

James H. Larose of Atlanta presented an exhibit, "Effective Thyroxine Ratio," at the annual meeting of the Society of Nuclear Medicine in Boston in July.

Seventh District

Stephen D. Smith, Rome, was elected president of the State Mutual Insurance Company at a regular quarterly meeting of the Company's Board in July.

Ninth District

Wiley S. Black resumed his practice of surgery in Gainesville in July, following a year's fellowship in vascular surgery at the New York University Hospital.

Tenth District

J. G. Bohorfoush was honored in July upon his retirement after 12 years of service as director of the General Medical and Surgical Unit of Central State Hospital, Milledgeville.

Curtis H. Carter was named Dean of the School of Medicine at the Medical College of Georgia, Augusta, in June.

John R. Curtis, Athens, was named to the Fellowship of the American Psychiatric Association in July.

DEATHS

Lothar Wilhelm Kaul

Lothar Wilhelm Kaul, 49, died July 3 in Athens.

A native of Germany, he came to the United States in 1956 to study at Duke University. He moved to Athens in 1969, where he established his practice.

He was a member of the American Medical Association, the Seventh District Medical Society and the Crawford W. Long Medical Society.

Dr. Kaul is survived by three sons, Lothar Kaul, Matthew Kaul and Richard Kaul, all of Athens, and one brother, Werner Kaul, of Hamburg, Germany.

Emory R. Park

Emory R. Park, 86, died July 1 at City-County Hospital in LaGrange after an illness of several months.

Formerly state physician for the Georgia State Board of Health, he was a graduate of the Jefferson Medical College in Philadelphia.

Serving in World War I as an officer in the Army's Medical Department, he returned to LaGrange and established the Ellis Public Health Law throughout Troup County.

Dr. Park was past president of both his District and County Medical Society and of the Scientific Staff of the City-County Hospital.

He was also president of the LaGrange Rotary Club and chairman of the Official Board of the First Methodist Church.

Dr. Park is survived by two half brothers, Harold Park of Atlanta and Arthur Park of Orlando, Fla.; four nieces and two nephews.

Carl Belmont Welch

Carl Belmont Welch, 86, died June 27 in Memorial Hospital in Bainbridge after a lengthy illness.

A native of Truitt, Alabama, Dr. Welch had resided in Attapulgus for the past 40 years. He was a member of the Decatur-Seminole Medical Society, Attapulgus Masonic Lodge and the Shriners. He was a veteran of World War I.

Dr. Welch is survived by his widow, Mrs. Cornelia Lester Welch, Attapulgus; a daughter, Mrs. Alfred W. Small, Atlanta; three sons, L. Lee Welch, Telferner, Texas, John Madison Welch, Dayton, Ohio, and Dr. Carl Lester Welch, Hickory, North Carolina; 11 grandchildren and five great-grandchildren.

THE MONTH IN WASHINGTON

The 1972 Democratic campaign platform calls for establishment of a federally-administered, comprehensive national health insurance system to cover all Americans and to incorporate eventually all federal health programs.

The majority of the Democratic platform committee proposed that the system be financed by the federal government. A minority wanted it financed under social security.

The health care plank was hammered out by Democratic policy makers in Washington prior to the presidential nominating convention in Miami Beach. Several positions, including the stand on Health Maintenance Organizations, in the health care plank were similar to those of the American Medical Association.

Health care parts of the platform proposed by the majority of the drafting committee include:

Health Care

Good health is the least this society should promise its citizens. The state of health services in this country indicates the failure of government to respond to this fundamental need. Costs skyrocket while the availability of services for all but the rich steadily decline.

We endorse the principle that good health is a right of all Americans.

America has a responsibility to offer to every American family the best in health care whether they need it, regardless of income or where they live or any other factor.

To achieve this goal the next Democratic Administration should:

—Establish a system of universal national health insurance which covers all Americans with a comprehensive set of benefits including preventive medicine, mental and emotional disorders, and complete protection against catastrophic costs, and in which the rule of free choice for both provider and consumer is protected. The program should be federally-financed and federally-administered. Every American must know he can afford the cost of health care whether given in a hospital or a doctor's office;

—Incorporate in the national health insurance system incentives and controls to curb inflation in health care costs and to assure efficient delivery of all services;

—Continue and evaluate Health Maintenance Organizations;

—Set up incentives to bring health service personnel back to inner-cities and rural areas;

—Continue to expand community health centers and availability of early screening diagnosis and treatment;

—Provide federal funds to train added health manpower including doctors, nurses, technicians and paramedical workers;

—Secure greater consumer participation and control over health care institutions;

—Expand federal support for medical research including research in heart disease, hypertension, stroke, cancer, sickle cell anemia, occupational and childhood diseases which threaten millions and in preventive health care;

—Eventual replacement of all federal programs of health care by a comprehensive National Health Insurance System;

—Take legal and other action to curb soaring prices for vital drugs using anti-trust laws as applicable and amending patent laws to end price-raising abuses, and require generic-name labeling of equal-effective drugs; and

—Expand federal research and support for drug abuse treatment and education, especially development of non-addictive treatment methods.

Birth Control

On birth control, the platform states:

—Family planning services, including the education, comprehensive medical and social services necessary to permit individuals freely to determine and achieve the number and spacing of their children, should be available to all, regardless of sex, age, marital status, economic group or ethnic origin, and should be administered in a non-coercive and non-discriminatory manner.

On rights of veterans:

—MEDICAL CARE: The federal government must guarantee quality medical care to ex-servicemen, and to all disabled veterans, expanding and improving Veterans Administration facilities and manpower and preserving the independence and integrity of the VA hospital program. Staff-patient ratios in these hospitals should be made comparable to ratios in community hospitals. Meanwhile, there should be an increase in the VA's ability to deliver outpatient care and home health services, wherever possible treating veterans as part of a family unit.

We support future integration of health care for veterans into the national health care insurance program, with no reduction in scale or quality of existing veterans care and with recognition of the special health needs of veterans.

The VA separate personnel system should be expanded to take in all types of health personnel, and especially physician's assistants; and VA hospitals should be used to develop state medical schools and area health education centers.

The VA should also assume responsibility for the care of wives and children of veterans who are either permanently disabled or who have died from service-connected causes. Distinction should no longer be made between veterans who have seen "wartime," as opposed to "peacetime," service.

Benefits for Elderly

For the elderly:

—Establish federal standards and inspection of nursing homes and full federal support for qualified nursing homes;

—Pending a full national health security system, expand Medicare by supplementing trust funds with general revenues in order to provide a complete range of care and services; eliminate the Nixon Administration cutbacks in Medicare and Medicaid; eliminate the part B premium under Medicare and include under Medicare and Medicaid the costs of eyeglasses, dentures, hearing aids, and all prescription drugs and establish uniform national standards for Medicaid to bring to an end the present situation which makes it worse to be poor in one state than in another.

Senatorial Support

Before the platform was drafted, two of the Democrats' big guns on health care in Congress appeared jointly for the first time at a platform subcommittee predrafting hearing in St. Louis. They were Rep. Wilbur D. Mills of Arkansas and Sen. Edward M. Kennedy of Massachusetts. They showed themselves together in support of a broad national health insurance but still were not in agreement over how it should be financed and administered.

The platform committee accepted Kennedy's views on these two points but Mills' ideas probably will carry more weight when Congress gets around to taking up such legislation.

"The federal government should establish a system of compulsory national health insurance which covers all Americans with a standard, comprehensive set of basic health insurance benefits supplemented by protection against catastrophic costs," said the Mills-Kennedy statement which included four "freedom guarantees":

—The federal government should not own and operate the various elements of the health care system.

—The federal government should not remove the freedom of every physician and every patient to choose where and how they will give or receive health care.

—Neither the federal government, nor any of its agents, shall make any medical judgments in a patient's care; this function is reserved solely to the physician and his peers.

—The federal government shall not make community health policy but shall offer financial and technical support and information and guidelines based on national planning to support local policy formulation.

Feasibility Urged

Dr. John R. Kernodle, then vice chairman (now chairman) of the AMA Board of Trustees, urged that any national health insurance program supported by the Democratic party be feasible as to benefits, financially responsible and be built on the present proven system of health care delivery.

"In considering any proposal for national health insurance, it is important that several factors receive a careful evaluation," Dr. Kernodle said. "First, the program must be feasible in terms of services offered and promises made. It should not hold out promise of benefits which cannot be fulfilled. We urge that any program should be financially responsible, so that public funds are utilized principally to provide financial assistance to those individuals who cannot finance their own medical care through their personal resources. The adoption of any national health insurance plan which undertakes the total medical care of everyone, regardless of their financial circumstances, and does this at public expense, is unwarranted. We would further urge that any plan which is adopted by your Committee also incorporate the use of those private institutions and those private resources and those proven methods of health care delivery which have provided to the people of the United States high quality medical care. Any plan should build on those strengths of the present system and be the means by which a new era of good health and productivity is ushered in for the American people. . . .

Backs Medicredit

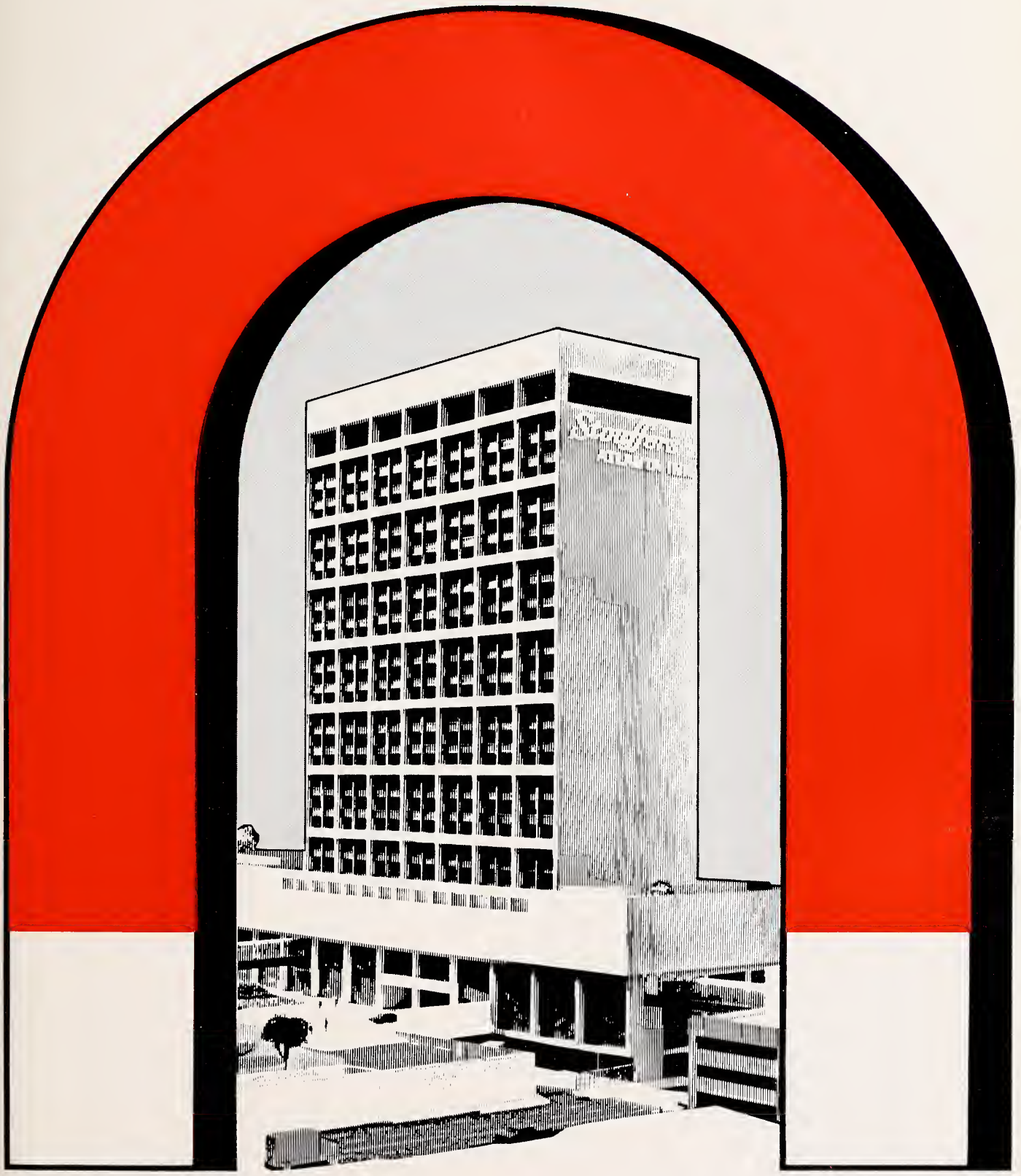
"The physicians of America have always maintained that high quality medical care should be available for all Americans, including those who need financial assistance in meeting the cost of such care. We believe that the public health care dollar is used most effectively when it is applied principally for the benefit of those individuals and families whose financial circumstances preclude them from acquiring health insurance protection from their own funds. We believe strongly that to a maximum degree possible any national health insurance program should utilize those mechanisms which have proved themselves to be beneficial in the provision of care to private patients. At the same time we favor experimentation, innovation, and the trial of multiple alternative methods for health care delivery to promote the evolutionary development of productive and viable systems of health care appropriate to the needs of a variety of communities.

"We believe that this policy of providing most financial help to those who require help and to permit them the dignity of private care is best incorporated in a proposal which was written by the medical profession known as Medicredit and which has been sponsored by 172 members of the present 92nd Congress. This program, using tax credits, enables all individuals to acquire the type of health care services they prefer. It provides a uniform level of benefits—comprehensive in scope."

ERRATUM—In the 1972 *Yearbook* of the Medical Association of Georgia, the following was omitted from page 14, under "Hospitals in Georgia":

Doctors Memorial Hospital, 20 Linden Ave., N.E., Atlanta *(Fulton)*, 30308.

JOURNAL
OF THE MEDICAL
ASSOCIATION
OCTOBER / 1972
Georgia



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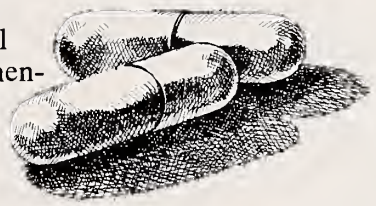

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Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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OCTOBER 1972 *Volume 61, Number 10*

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Contents

Special Articles

Scientific Articles

Editorial

Features

The Association

Cover

Stouffer's Inn of Atlanta, headquarters for the November 11th and 12th MAGNET Conference, is framed in the conference symbol by artist Robert Hamill, Atlanta.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

Cautious optimism is voiced in this informative report.

The Treatment of Narcotics Addiction in Georgia

PETER G. BOURNE, M.D.,* *Atlanta*

DURING THE PAST TWO YEARS, Georgia has experienced a spectacular and alarming increase in its narcotics addict population. There were 818 narcotics arrests in Atlanta in the first 10 months of 1971, more than twice the number seen in the same period in 1970. Between 1966 and 1971, the State's correctional facilities experienced a ten-fold increase in drug abuse related incarcerations, from 40 to 431. There are approximately 5,000 heroin addicts in Atlanta, 1,000 in Columbus, 500 in Savannah, 400 in Macon, 300 in Augusta, and an indeterminate number in the smaller communities, such as Athens, Albany, Valdosta, Gainesville and Brunswick.[1]

Prior to June, 1971, there was no over-all effort to coordinate and develop a treatment program for drug addicts in Georgia. The only programs in the entire State offering methadone maintenance were operated by Grady Memorial Hospital in Atlanta with a capacity for handling 20 addicts, and a private practitioner with a total of 12 patients in treatment. Other programs for drug abuse were fragmented and uncoordinated.

In June of 1971, the Georgia Narcotics Treatment Program (GNTP) was established by Governor Jimmy Carter as an independent agency operating out of his office to develop and coordinate all drug programs in the State. Although the agency has the responsibility for all drug programs in the State, the top priority during the first six months of operation has been to make treatment for heroin addicts available throughout Georgia. This paper describes primarily the development of the program as it relates to heroin addiction.

*Office of Drug Abuse, Georgia Department of Human Resources, Atlanta, Georgia 30334.

The Development and Operation of the Program

By operating directly out of the Governor's Office, the GNTP has had the authority necessary to cut many of the usual administrative delays in rapidly establishing services. Being outside of existing agencies has facilitated the development of collaborative relationships with the Departments of Labor, Education, Corrections, Law Enforcement and Family and Children Services, all of which are directly or indirectly involved in the field of addiction. Operating from the State level has also permitted the development of services based on community needs without the artificial restrictions of city and county boundaries.

To ensure centralized coordination of all methadone maintenance programs throughout the State, a single IND license has been obtained in the name of the Director of the GNTP. Affiliated programs submit protocols to the GNTP which are reviewed and filed with the FDA as amendments to the original IND. This provides for uniform reporting, evaluation, and quality control among all programs in the State. New FDA regulations are presently being developed and a single central coordinating agency will then be required by law in each State.

The Georgia Narcotics Treatment Program offers a multimodality approach to the treatment of addiction. Outpatient treatment centers providing de-

toxification, maintenance and abstinence programs, combined with supportive counseling and rehabilitative services, are the basic elements of the treatment network. Inpatient back-up is provided by the Regional Mental Hospitals. Some of the facilities are operated directly by GNTP, some are contracted to other agencies, and some, like Grady, operate coordinated but administratively independent programs.

Central Intake Center

In Atlanta a central clinic for all intake and evaluation has been established as well as nine outpatient clinics located throughout the city, which offer a full range of counseling and rehabilitative services. These long term treatment centers also seek to provide job placement for patients stabilized in treatment. Four additional clinics, three therapeutic communities, and a residential facility for juveniles are projected for development in 1972.

The object of the intake center is never to turn away any addict and to always be able to provide at least some basic emergency care. When an individual comes to this facility, he receives a complete medical evaluation and work-up and if appropriate is placed on a holding dose of methadone. Over the next two weeks, his condition is evaluated and he is started on a specific program of either maintenance, detoxification or abstinence. The individual will come to this holding facility on a daily basis until an opening becomes available for him at one of the comprehensive treatment centers or the therapeutic community. At that time, he will then be transferred to that facility where he will receive not only methadone, but all of the other supportive services. The intention is to provide as complete an evaluation of the patient as possible and place him in whatever type of treatment program will most effectively meet his needs.

Growth of Centers

Outside of Atlanta a clinic has been established in Macon, Columbus and Savannah. A fourth is planned for Augusta. Each of these centers has the capacity to handle up to 150 addicts.

During the next three months it is planned that the treatment center in Columbus will be expanded to handle up to 300 patients and a residential facility and two crisis counseling centers will be opened.

In Waycross a dozen or so addicts have been detoxified through an arrangement with a private physician and similar plans are being developed in Brunswick. If the load warrants and if the problem of addiction becomes sufficiently severe in these communities it may be necessary to establish small clinics providing maintenance. This might possibly be done by having pharmacists dispense the methadone on an ongoing basis to patients who had previously been stabilized at a facility in one of the larger communities.

Throughout the State treatment records, census and identification information, and a core of each patient's file and methadone inventory records are stored in a statewide computer system. Patients are identified by photographic ID cards. Methadone is prepared and bottled in unit dose form by machine and daily transported to clinics (Atlanta area only). This system provides daily updating of treatment schedules, positive identification of patients, while preventing dual registration insofar as possible, close control of methadone and a readily accessible file for research and evaluation of the program throughout the State. Confidentiality is protected by coded entry into the computer and legislation, which specifically requires permission from the patient for anyone to have access to his file if he is in this system.

Special Projects

Several special projects including programs to serve specific groups are being instituted.

One of the centers in Atlanta operated downtown by the Veterans Administration is a storefront facility serving Veteran addicts. All patients passing through the central Atlanta Intake Center who are identified as Veterans are transferred to this center for long term treatment.

All patients seen in the early stages of the program were seen on a voluntary basis. Recently, an increasing number of patients are being placed on the program as a requirement of probation. A special center is presently being developed which will serve all the patients who are in this category.

A halfway house combined with an outpatient clinic, specifically for former drug users coming out of the State penal system, is being developed jointly with the Georgia Department of Offender Rehabilitation. This will hopefully reduce the recidivism of persons leaving the prisons by easing their return to society and helping them cope with the temptations to resume drug use and criminal activity.

Liaison with Criminal Justice

In a related area, GNTP is initiating development of a liaison with the criminal justice system. Through relationships with the courts, district attorneys and probation systems, outpatient treatment as a condition of probation or *in lieu* of prosecution

will be developed as an alternative to incarceration for persons whose criminal problems stem mostly from heroin. A law enforcement officer works in the office of the Director of GNTP to serve in a liaison capacity with law enforcement agencies.

Withdrawal from narcotics has become a serious health problem in the city and county jails of Georgia's larger cities. GNTP is working with police and sheriff departments to provide treatment for withdrawal in the jails and to encourage as many of these people as possible to seek therapy through GNTP. Urine surveillance studies in the jails are being instituted to help measure the incidence of drug abuse in Georgia's larger communities, and to identify those with an additional problem so that at an appropriate point in the criminal justice system they can be channelled into treatment. Recent figures from Augusta show that 53 per cent of all felons arrested have evidence of heroin addiction in their urine.

A central information center, somewhat along the lines of the National Clearinghouse for Drug Abuse Information, has been established in Atlanta. A statewide, toll-free telephone number is available for anyone, anywhere in the state to call. Persons may call seeking information about drugs, drug programs or referral to services close to them. The number will also serve as an emergency number for patients who are hospitalized or who cannot otherwise attend their clinic. This will ensure continuity of service to these patients. It will also provide to physicians information concerning treatment of drug abuse as well as general information about the therapeutic use of drugs.

An additional service of the information center will be its capability to provide to individuals and groups literature and films to support drug abuse education and prevention programs throughout the State. This center will soon be linked to the computer at the National Clearinghouse for Drug Abuse Information. This will enable GNTP to directly conduct searches of the material on file at the Clearinghouse as a service to the people of the State. The development of this center will allow individuals in any community in the State to feel that they have access to and can benefit from the program. The toll-free phone number is 1-800-282-0228. The Center will also soon begin operating a media truck which will be available throughout the State to provide information and education about drug abuse.

The Results of the Program

The GNTP began seeing patients during September, 1971, and in the eight months since then more than 2,200 heroin addicts have been treated; nearly 2,000 of these have been in the Atlanta area. Many who have been detoxified subsequently failed to stay away from heroin and are now returning to the program for the second time. However, approximately 800 have remained in long term treatment. To date no patients are being turned away and there are no waiting lists.

Based on the first 1,000 patient files entered into the computerized data system the following are some preliminary demographic data about this population as well as some information about its overall age of first heroin use.

The race/sex breakdown of the patient population is as follows: black male, 49.9 per cent; black female, 15.4 per cent; white male, 24.3 per cent; and white female, 10.0 per cent. The 65.3 per cent black population in our clinics contrasts with the fact that blacks form 25.0 per cent of metropolitan Atlanta's population. (Table 1.)

The mean ages of the patient group overall is 24.6 years. For subgroups, the ages are: black male, 25.0; black female, 24.7; white male, 24.1; and white female, 23.4. This closely corresponds to age information from Washington, D.C. where the average age in the first six months of the Narcotics Treatment Administration was reported as 25.9.[2] Most other cities have reported patient populations at least several years older than Atlanta or Washington. (Table 2.)

The mean age for first use of heroin for GNTP patients is 20.2 years.

TABLE 1

RACE AND SEX OF GNTP PATIENTS ON FILE INITIAL 95 DAYS OF OPERATION

	GNTP Patients	%	% Metro Atlanta Population
Black Male	405	49.9	11.5
Black Female	125	15.4	13.4
White Male	197	24.3	36.4
White Female	81	10.0	38.7
Other	3	0.4	—
	811	100.0	100.0

TABLE 2

MEAN AGE OF GNTP PATIENTS BY RACE AND SEX INITIAL 95 DAYS OF OPERATION

Black Male (405)	25.0
Black Female (125)	24.7
White Male (197)	24.1
White Female (81)	23.4
Average Overall	24.6

Treatment Affects Crime

By patient report the average daily heroin habit of patients entering the program is $50.00. In general this means that the addict must steal goods worth approximately three times this amount to buy his heroin. One would anticipate then that by getting significant numbers of people into treatment that the crime rate would fall. Throughout the country this has been the case. After narcotics treatment programs were initiated in Washington, D.C., Westchester, New York, Detroit and Laredo, Texas, all reported a drop in their crime rates. We, therefore, predicted last September that this would occur in Atlanta, and the most recent crime data bears this out. Figures 1-3 show the change in the overall crime rate as well as the change in specifically affected categories before and after the implementation of services. We anticipate that similar alleviation in the crime rates will occur in Macon, Columbus and Savannah as significant numbers of patients enter treatment in our centers in those cities.

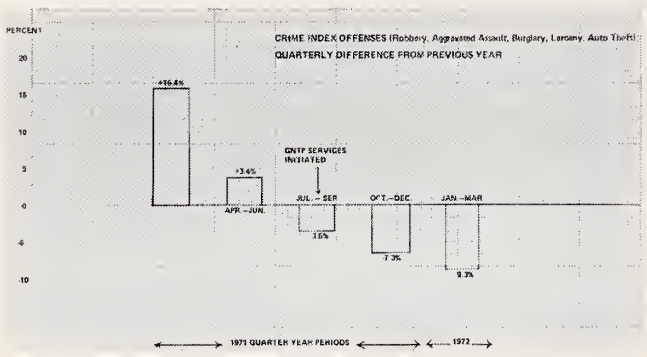

FIGURE 1

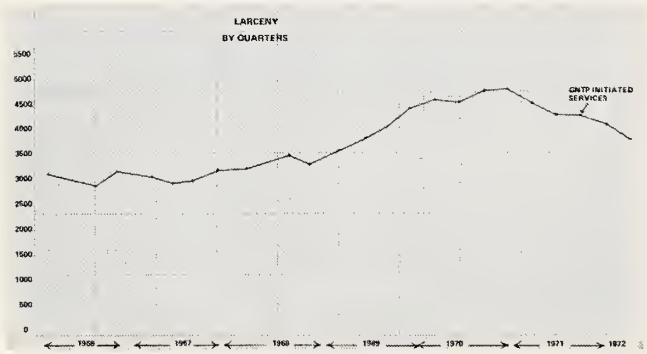

FIGURE 2

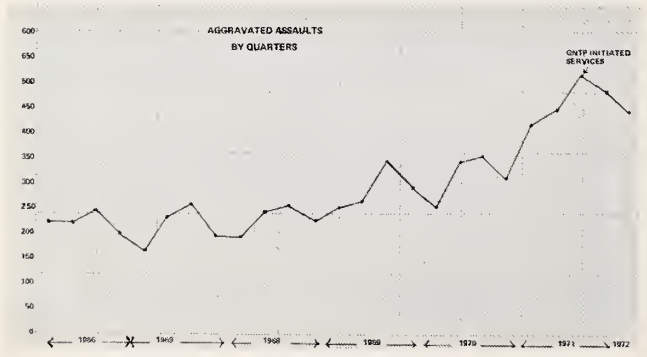

FIGURE 3

Other indications of the impact of the program include a drop in the heroin overdose deaths in Atlanta—17 in the first nine months of 1971, none in the last three months of the year. While a more subjective measure, but perhaps equally significant, are the reports from addicts themselves that the amount of heroin being used in the state is diminishing now that so many addicts are in treatment and perhaps most important that substantially fewer new people are starting on heroin as compared to six months ago. The purity of heroin on the streets of Atlanta has dropped from 12 per cent to 2.8 per cent.

It is hard to tell how effective the program will be in the long run, but based on the results of the first year's operation, we feel that we can be cautiously optimistic about coming to grips with the heroin addiction problem in Georgia.

615 Peachtree Street, NE 30308

REFERENCES

1. Estimates based on treatment records from Grady Memorial Hospital in Atlanta, and reports from police and public health officials.
2. Barry S. Brown, Robert L. DuPont et al.: Impact of a large scale narcotics treatment program—a six month experience; *NTA,* Washington, D.C., 1971.

It is a misconception that halogen atoms are responsible for the toxic manifestations.

Drugs Containing Halogen Atoms: Toxicity and Lack of Toxicity*

JOHN ADRIANI, M.D.* *and* WILLIAM M. YARBROUGH, M.D., *New Orleans, La.*

HEPATOTOXICITY associated with the use of halothane and methoxyflurane is receiving widespread publicity and becoming a matter of increasing concern to surgeons and internists, as well as anesthetists. The mere mention of the term "halogenated" in reference to drugs implies toxicity and, usually, hepatotoxicity to many persons. This implication is erroneous because many classes of drugs that have actions other than depression of the central nervous system and are not used for anesthesia have halogen atoms incorporated into their structure, yet few possess the types of toxicity characteristic of the halogenated hydrocarbons and ethers.

Effects of Halogenation

Halogenation of many compounds usually increases pharmacologic activity and potency and, in many cases, toxicity. In other cases it may increase both toxicity and decrease potency, and in others, toxicity is decreased and potency is increased. In the case of central nervous system depressants, potency and toxicity increase; volatility and flammability decrease. The halogens are four in number: fluorine, chlorine, bromine, and iodine. The lightest and most active chemically is fluorine, the molecular weight and activity increasing with each as listed.

Halogenated drugs used for anesthesia or hypnosis fall into two groups, the volatile and the nonvolatile. The volative compounds are used for inhalation anesthesia. These are straight-chained hydrocarbons or ethers. They produce surgical anesthesia, loss of reflex activity, and varying degrees of muscle relaxation. The cyclic organic halogenated compounds are not anesthetic. The volatile compounds, on the whole, are inclined to be cardiotoxic and hepatotoxic, while the nonvolatile are not. Presently available halogenated hydrocarbon and ether anesthetics include chloroform, which is practically obsolete, halothane, trichloroethylene (Trilene), methoxyflurane (Penthrane), and fluroxene (Fluoromar).

The nonvolatile compounds include straight-chain alcohols and aldehydes, such as trichloroethanol, tribromoethanol, ethchlorvynol, chloral, chloretone, and certain cyclic derivatives such as the barbiturates and substituted ureas, various psychosedatives (tranquilizers) such as the phenothiazines (chlorpromazine, Vesprin), and chlordiazepoxide (Librium). The hepatotoxicity and cardiotoxicity that characterize the hydrocarbons and ethers are seldom attributes of the halogenated nonvolatile hypnotics and sedatives.

As a general rule, chlorination and bromination increase the potency and toxicity of both volatile and nonvolatile compounds, but this is more evident with the volatile inhalation anesthetics than the nonvolatile. Bromination and chlorination of hydrocarbons increase potency and toxicity and reduce volatility and flammability. Halogenation with chlorine, bromine or iodine generally decreases stability; fluorination increases stability. Iodinated compounds are impotent as central nervous system depressants. They are used as germicides or in contrast media. Fluorine alone may reduce narcotic potency in a hydrocarbon or ether. In some cases it may convert it into a convulsant (fluoroether). Chlorine or bromine or both are usually present on the molecule of an effective compound. Halogenated compounds are, as a rule, less stable in the body than the parent

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hydrocarbon or ether and are more apt to be metabolized. The nonvolatile halogenated drugs are metabolized. The chief characteristic of the halogenated hydrocarbons and ethers that has led to their widespread use is their lack of flammability. Their drawbacks and propensity for producing adverse side effects have been minimized because emphasis has been placed on the lack of flammability.

The greater degree of toxicity of the halogenated volatile hydrocarbons and ethers may be due to the fact that they are less stable in the body than their non-halogenated counterparts and therefore undergo a greater degree of biotransformation. The possibility that metabolites may cause tissue injury or sensitization cannot be disregarded. Trichloroethylene, for example, is metabolized in the liver to trichloroethanol, which is excreted as trichloroacetic acid. These metabolic products do not appear to injure the tissues. As much as 10 per cent of the total of an inhaled quantity is excreted in this manner. This excretion requires several days. Halothane likewise undergoes biotransformation in the body, and quantities varying from 10-20 per cent may undergo breakdown in the microsomes of the liver. The end product of biodegradation of halothane is trifluoroacetic acid, which is excreted into the urine. There is some conjecture that some intermediate metabolite may be responsible for liver necrosis.

Types of Toxicity

Although cardiotoxicity and hepatotoxicity seem to be emphasized, other types of toxicity may result from halogenated compounds. Nephrotoxicity and neurotoxicity, though less frequent, likewise occur. Cutaneous lesions may also occur. These may be a manifestation of either local irritation or allergy. In many cases cutaneous toxicity is due to excretion of bromine or iodine through the sweat glands, which causes a chemical dermatitis. The gastrointestinal tract, bladder and lungs may be adversely affected by halogenated drugs or impurities in them or their metabolites more rarely than the aforementioned organs. These reactions occur on the mucous membrane and are due to local irritation.

Cardiotoxicity

The cardiotoxicity of ethers and hydrocarbons is transient and disappears as soon as the agent is eliminated. No permanent injury results. All anesthetics cause some degree of myocardial depression but the halogenated hydrocarbons as a class and, to some extent, the ethers, cause a greater degree of depression of the myocardium than their non-halogenated counterparts. In addition, they cause sensitization of the pacemaker tissues. The sensitization is augmented by an increase in arterial carbon dioxide tension, a concomitant use of catecholamines (epinephrine, norepinephrine or levarterenol), or an increase in autonomic nervous system activity. The effect on the pacemaker cells likewise is reversible and disappears when the agent is eliminated.

The myocardial depression is characterized by a decrease in contractility, a decrease in the rate of depolarization of the myocardial cells, and other changes. The end result of myocardial depression is a reduction in cardiac output, a decrease in blood pressure and prolonged circulation time. An increase in venous pressure may occur because the heart does not completely eject the blood that is returned to it. Overdosage usually causes asystole. Ventricular fibrillation is uncommon in man with the currently used halogenated compounds unless used with the catecholamines.

The arrhythmias may occur spontaneously, particularly at deeper levels of anesthesia. They occur more often when ventilation is not adequate or when other drugs are used in conjunction with the anesthetics, such as the catecholamines and vasopressors, particularly those that cause vagal stimulation—methoxamine (Vasoxyl), phenylephrine (Neo-Synephrine). Various arrhythmias may occur during induction. These are vagal in origin and are mediated via the vagus nerves which subserve the receptors in the upper respiratory passages. These are characterized most often by bradycardia, bigeminy, or premature beats. The impulses pass from the mucosal receptor to the medulla and are then relayed to the heart via the cardiac vagus nerves. This type of arrhythmia may be avoided or counteracted by adequate doses of atropine.

Hepatotoxicity

The hepatotoxicity associated with halogenated drugs is not confined principally to straight-chain anesthetic compounds or solvents. Hepatotoxicity that characterizes the hydrocarbons and ethers seldom is an attribute of halogenated nonvolatile hypnotics and sedatives. The hepatotoxicity associated with halogenated volatile anesthetics may be of various types due to the following causes: (1) A direct toxic effect on the hepatic cells. (2) Secondary or remote effects; that is, secondary to hypotension, anoxia, nutritional deficiencies, etc. (3) Allergic reactions. These are also termed "sensitivity reactions." (4) Interaction with other drugs or their metabolites taken for prior therapy which are also hepatotoxic, and the anesthetic. (5) Activation of latent or enhancement of a subclinical viral infec-

tion of the liver. (6) Toxicity due to the drugs other than the anesthetic drug.

Nephrotoxicity

Nephrotoxicity from anesthetics due to direct action on the renal tissues is rare indeed. Decrease of renal function occurs during anesthesia but this is functional and reversible; no permanent injury results. Nephrotoxicity or renal dysfunction of pathologic origin has been reported principally with methoxyflurane. Fluorinated by-products and the fluoride ion, liberated by biodegradation, are believed to cause the renal tubular injury. The degree of injury to the kidney appears to be dose related. The deeper the level of anesthesia, the longer its administration, the greater the likelihood of its occurrence. Methoxyflurane is the most fat soluble of the inhalation anesthetics and remains in the adipose tissues for many days, from which it is slowly released and metabolized. Its presence in the body for such a long time contributes to its propensity for being nephrotoxic. This syndrome has been referred to as "high output renal dysfunction." The concentrating power of the distal tubules is diminished and the tubules do not respond to the antidiuretic hormone. The syndrome is reversible. The National Research Council Committee on Anesthesia has reviewed the available data and is unwilling to concede that the drug is primarily responsible for the syndrome from the data available to date. They recommend that the drug still be made available and more definitive evidence be obtained before drawing any conclusions.

Bleeding into the renal tubules due to disturbances of the clotting mechanisms in cases of direct hepatic injury from a drug such as chloroform and carbon tetrachloride may also occur. This obviously is an indirect action rather than a direct one of the anesthetic.

Certain non-anesthetic halogenated compounds exert a direct toxic effect on renal cells themselves. Some solvents and certain contrast media containing iodine are also responsible for this type of toxicity. The incidence of nephrotoxicity due to antibiotics is, relatively speaking, high and dwarfs the renal difficulties due to other drugs.

Neurotoxicity

Neurotoxicity may result from the breakdown of some volatile halogenated hydrocarbons within the body. The one-carbon compounds form methyl alcohol, which is then oxidized to formaldehyde and formic acid, which are neurotoxic. Various types of neuritis, including blindness, may result.

Certain agents may be impure or undergo decomposition during their administration. These breakdown products cause neuritis and palsies. This type of reaction may follow the use of trichloroethylene. Trichloroethylene exposed to the alkali in canisters of anesthesia apparatus is converted to dichloracetylene, which is both neurotoxic and has a tendency to be explosive. Although all the cranial nerves may be affected, the fifth is the most susceptible. Bilateral anesthesia of the face has resulted. The breakdown to trichloracetylene occurs slowly. The toxic compound accumulates in the soda lime or baralyme. The patient being anesthetized with trichloroethylene may suffer no ill effects. The patient anesthetized subsequently, even though another agent is used, may inhale the decomposition products and develop neuritis. This type of neuritis is usually transient and lasts for six or seven weeks, or even longer. An alleged specific action of trichloroethylene on the fifth nerve, cranial nerve, was reported many years ago but this is now believed to have been caused by impure trichloroethylene. Neurotoxicity does not result from the breakdown products of trichloroethylene, namely, trichloroethanol and trichloracetic acid, however. Hexachlorophene (pHisoHex) is a halogenated nonanesthetic benzene compound used as an anesthetic and germicide and may be neurotoxic if absorbed in large amounts.

Miscellaneous Toxic Reactions

Some halogenated hydrocarbons used principally as solvents may produce miscellaneous toxic reactions. Pulmonary irritation may be caused by impurities in some volatile halogenated anesthetics. Phosgene, a breakdown product found in chloroform, trichloroethylene, and a number of other agents may cause pulmonary irritation. Phosgene vapor is nonirritating and easily inhaled but is converted to hydrochloric acid and carbon dioxide when it comes into contact with water in the alveoli. The hydrochloric acid causes injury to the lung parenchyma and pulmonary edema results. Experimental pulmonary edema can be produced in animals by administering phosgene. Certain halogenated compounds may exert a direct toxic effect on the epithelial cells of the lungs and gastrointestinal tract. Carbon tetrachloride and related hydrocarbons used as vermifuges may act in this manner. The halogenated ethers are lacrimators and have been used in formulations for tear gases.

Hepatotoxicity and cardiotoxicity, including both myocardial depression and sensitization of the conducting tissues due to nonvolatile halogenated drugs such as chloral, ethchlorvynol or tribromoethanol are rare. Tribromoethanol (Avertin), widely used years ago for rectal anesthesia, was neither cardiotoxic nor hepatotoxic. Chloral hydrate, which is still

used as a hypnotic, lacks this type of toxicity although once it was said to be cardiotoxic. This is now known not to be correct unless overdosage occurs. Ethchlorvynol (Placidyl), a hypnotic, likewise is not cardiotoxic or hepatotoxic. The phenothiazines (chlorpromazine) are hepatotoxic to varying degrees but this applies to both the halogenated and non-halogenated types of these drugs.

Toxicity Associated with Halothane

The hepatotoxicity following the use of halothane has received and is receiving more attention. Halothane, unlike chloroform and other compounds, is not directly toxic to the liver cells. It is now felt that the hepatic changes, if indeed they are due to halothane, are actually due to sensitization rather than to direct hepatotoxicity. This belief is based upon the fact that often the hepatitis is accompanied by urticarial rash and eosinophilia and occurs after multiple rather than single exposures. Low titers of antibodies acting on the mitochondria have been reported; however, these tests are still investigative and their usefulness remains open to question. Since the lesions frequently resemble those caused by viruses, viral infections are incriminated and it has been difficult to rule out this possibility. The recent discovery of the Australian antigen, the presence of which is evidence that serum contains the virus that causes serum homologous jaundice, has been hailed as a valuable diagnostic tool. The absence of the Australian antigen was assumed to be presumptive evidence that halothane is responsible for the hepatitis following the use of the agent, and not a virus; however, it has now been shown that tests for the Australian antigen may be misleading. The concentration of virus causing viral hepatitis in the blood may be too low to give a positive response in as many as 30 per cent of the cases. The test therefore may be erroneously assumed to be negative when actually the virus was present. Thus, a patient may have a subclinical type of hepatitis which may be aggravated during the operation under halothane anesthesia. Lymphocytic stimulation has been reported to occur after halothane anesthesia and likewise is a characteristic which suggests that hepatotoxicity is due to some type of sensitization reaction.

Hepatitis from Halothane

Factors in favor of the hypothesis that halothane causes hepatitis are: (1) It is a volatile halogenated hydrocarbon and therefore belongs to a group of chemicals known to have a propensity to cause hepatotoxicity. (2) Ten per cent or more of the agent undergoes breakdown in the body and the metabolite may be toxic to the liver cells or act as the triggering agent to arouse a dormant or subclinical state of hepatitis. (3) Sensitivity phenomena, such as fever, eosinophilia, skin rashes, precede the onset of the hepatitis. It has occurred in patients in whom nothing more was done than to administer the anesthetic and the usual premedication. In some cases this has occurred in performing minor surgical procedures in patients rated as "Class A." The factors that strongly suggest that the hepatic lesions associated with halothane are not due to the agent are: (1) The incidence of hepatitis and jaundice is relatively low in relation to the total number of individuals anesthetized with the agent. (2) Neither the incidence nor the severity are dose related. (3) The time of onset or period of incubation is variable and unpredictable and is not short, as in the case of chloroform, which is directly hepatotoxic. (4) The lesions are not specific and inconstant and in no way resemble those due to chloroform, carbon tetrachloride or other drugs that are direct acting. They resemble hepatic injury due to other drugs or viruses. (5) The lesions are not reproducible in animals, as is the case with halogenated agents that are directly hepatotoxic. (6) The lesions are less common after multiple rather than single exposures. (7) Though manifestations do not resemble those observed in classical types of allergy, such as hay fever, asthma, eosinophilia, fever and syndromes resembling serum sickness may accompany or precede the hepatitis.

Summary

Halogenated hydrocarbons and ethers used for anesthesia or solvents are capable of causing liver injury. This creates the misconception that halogen atoms are responsible for toxic manifestations. Numerous classes of drugs, most of them with pharmacologic effects other than central nervous system depression have halogen atoms incorporated in their molecules, but are devoid of toxicity characteristics of the anesthetic drugs.

Lack of flammability of halogenated hydrocarbons and ethers has led to their adoption and widespread use despite their propensity for cardiac and hepatotoxicity. This is unjustifiable.

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REFERENCES

1. Aach, R.: Halothane and liver failure; *JAMA* 211: 2145-47, 1970.
2. Adriani, J.: *Appraisal of Current Concepts in Anesthesiology;* St. Louis, Mo., C. V. Mosby, 1968, Vol. 4, pp. 84-98.
3. Austin, W. M. and Villandry, P. J.: Methoxyflurane and renal function; *Anesthesiology* 28:637, 1967.

4. Chelley, W. B.: Further experiences with indirect basophil tests; *Arch. Derm.* 91:165, 1965.
5. Crandell, W. B., Pappas, S. G. and MacDonald, A.: Nephrotoxicity associated with methoxyflurane anesthesia; *Anesthesiology* 27:591-607, 1966.
6. Editorial: Halothane: hepatitis or allergy; *Lancet* 975-976, 1969.
7. Editorial: Halothane—induced liver damage—an entity; *New Eng. J. Med.* 280:558-559, 1969.
8. Frazier, C.: Surgery and the allergic patient (Chapter by J. Adriani, *Drug Reactions and the Surgical Patient*); Springfield, Ill., Charles C Thomas, 1971.
9. Klatskin, G. and Kimberg, D. V.: Recurrent hepatitis attributable to halothane sensitization in an anesthetist; *New Eng. J. Med.* 280:515-522, 1969.
10. Kuzucu, E. Y.: Methoxyflurane, tetracycline and renal failure; *JAMA* 211:1162-1163, 1970.
11. Rodriguez, M. *et al.*: Antimitochondrial antibodies in jaundice following drug administration; *JAMA* 208:148-150, 1969.
12. Smith, J. W., Johnson, J. E. and Cluff, L. E.: Studies on the epidemiology of adverse drug reactions; *New Eng. J. Med.* 274:998, 1966.
13. Summary of the national halothane study; *JAMA* 197:775-788, 1966.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF COUNCIL

Sunday, August 13, 1972

Committee Conclave: Received reports and recommendations from Chairmen of 22 MAG Committees. One hundred and fifteen MAG members and guests participated in the 1972 Conclave.

Finance: Appropriated $100 to assist in defraying expenses of AAMSE meeting, September 11-12, 1972, Atlanta. Authorized signing contract in the amount of $1,850 for partitioning of space in the MAG Headquarters office to be used by EMCRO staff. Voted to appeal ad valorem property tax appraisal of MAG Headquarters Building.

Appointments: (MAG-GSNA) Joint Practice Committee: President, F. W. Dowda; President-Elect, C. Emory Bohler; 1st Vice President, Braswell E. Collins; Secretary, Earnest C. Atkins. Nominees to State Clinical Laboratory Blood Banks and Tissue Bank Committee: Robert E. Perry, Jr., Brunswick; John T. Godwin, Atlanta; Hugh V. Bell, Jr., East Point; W. Frank Matthews, Decatur; Hamil Murray, Gainesville; Hans J. Peters, Columbus. Nominated to Special Council on Family Planning: Eugene L. Griffin, Atlanta; Luella M. Klein, Atlanta. GRMP Advisory Group: First District Alternate, Leon Curry, Metter; Sixth District Alternate, Robert Copeland, LaGrange.

Board of Human Resources: Approved sending MAG liaison representative to each Board Meeting.

Medical Disciplinary Board: Requested legal counsel to present in September a cost estimate of legal work required to investigate other states and prepare bill.

MAG Headquarters Office: Approved hiring of legislative representative contingent on results of continued negotiations and review of references.

Area Planning and Development Councils: Authorized mailing to Council requesting nominees for MAG Medical Advisors in each APDC area to be appointed at September Council Meeting.

Georgia Medical Care Foundation: Reviewed new Foundation-Medicaid contract. Received report on development of Foundation activities at District level. Requested legal counsel to study whether the Foundation, as a non-profit corporation, might provide physician billing services.

Access to Medical Care: President Dowda reported on Foundation's grant request to GRMP for implementation of planning for "Felder Resolution."

Next Meeting: September 23, 1972, 10:00 a.m., The Cloister, Sea Island.

The low rehospitalization rate of 11.4 per cent would seem to endorse the effectiveness of this approach.

A Twelve Month Review of the Aftercare Clinic Activities in Barrow and Walton Counties

LUCIEN B. FLEURANT, M.D., FAYE M. HICKS, P.H.N., MARJORIE A. NORRIS, P.H.N., ROSLYN GOUGE, P.H.N., *and* ANGELA M. MCKAY, P.H.N., *Athens*

TRADITIONALLY, an Aftercare Clinic is an operation where patients, discharged from a Mental Institution, have their drugs regulated. These patients are largely in a state of psychotic remission. When we started the Aftercare Clinics, we wished to do more than the traditional. We stated as our overall objectives the development of improved personal, emotional, familial, and industrial adaptation for the patients. As a corollary, we postulated that there is no one in the community, including Central State Hospital patients, who is incapable of furthering these objectives.[1, 11]

Therefore the design of the Aftercare Clinics in Walton and Barrow was and is to promote these objectives through utilization of a consulting psychiatrist coming to a given clinic for a half-day twice a month. Of equal significance is the therapeutic role of the Public Health nurses affiliated with the Public Health County Department. Also included are the Vocational Rehabilitation resources, the members of the local Mental Health Association, representatives of the Welfare Department, the ministry, the Police Department, Family and Children Services, friends, relatives and other community groups and members.

In our endeavors, the psychiatrist and the Public Health nurses endorsed a co-therapeutic motif in the application of all treatment modalities.

As to the patients receiving treatment, one-third are schizophrenic. Most of the other two-thirds had other functional psychotic illnesses or reactions. A small proportion became psychotic as a consequence of organic brain syndromes from various causes. There are a few mental retardates, persons dependent on drugs, alcoholics and a few neurotics.

There follow descriptions of the various treatment modalities applied by the Aftercare staff to reach our objectives.

Group Therapy

Two motives prompted the choice of the group approach as the principal therapeutic instrument: a practical and a theoretical one.

On the practical side, more patients could be seen at one time.[3] Our groups generally last one hour and 15 minutes. Under other circumstances five patients, at the most, would receive a brief interview by a psychiatrist and obtain a prescription for tranquilizers or mood elevators. In contrast, by using a group, 10 patients can be seen for that period of time. Another practical consideration was that the patient can receive follow-up care every three months rather than the usual six months. There can be more therapist-patient exposure. Of course, during a psychological crisis, patients are seen more frequently on an individual, group or family basis.

On the theoretical side, utilization of groups as the main treatment modality was encouraged by its

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The review encompasses the interval from December 1970 to December 1971. The experiences of both clinics are presented in composite form.

The intent of the article is (1) to comment on the objectives of the Aftercare Clinics in Walton and Barrow counties; (2) to survey the multifaceted treatment modalities offered to patients eligible for Aftercare treatment, that is, those individuals on furlough from Central State Hospital in Milledgeville, Georgia. (3) We will also briefly examine the statistical outcome of the Aftercare endeavor. (4) Finally, it is hoped that from this paper ideas might be derived for implementation and validation or refutation in other counties.

enhanced rehabilatory effect as demonstrated in studies comparing the therapeutic use of psychotropic drugs alone as against the more beneficial combination of pharmacotherapy and psychotherapy.[5, 6] Our groups are therapeutic for our goal is to engender change.

The very fact that patients assemble in a group and begin to talk is for the great majority of them a change.[11]

The patient population is drawn primarily from rural areas. Of itself this fact lends to isolation. Apart from the inherent insularity of rural life, to someone recently discharged from Central State Hospital, the isolation can afford a seemingly desirable escape. Though recovered from the florid manifestations of the illness, the patients are ashamed and will capitalize on the isolation. It protects them from facing and resolving the social problems of being an ex-mental patient. However, the group situation obliges them to engage in a social experience within which they can work through their sense of unacceptability.

Additionally there is the opportunity for the therapists to employ the style of mobilizing the group members' potential for growth through the *prompts-reinforcement* technique.[7]

Sense of Community

Within each group, there is a spectrum of psychosocial normalcy and aberrancy. We strive to elicit expressions of normalcy, i.e. ego strengths. The internalization of these traits by the less well-equipped participants is thus made possible. Though problem sharing is not discouraged, more importance is given to solving problems that arise in everyday life. A sense of community is made possible.[7, 9]

The group has re-educative goals in the sense used by Wolberg.[13] Mental, emotional and behavioral disruption is viewed merely as a way of communicating needs, frustrations, conflicts, anxieties, shame and guilt. Together the members, patients and therapists, are sources of interpretive insights into the pre-conscious factors that can be channeled into adaptive, behavioral modes rather than to regressive ones.[10]

Change in a patient is acknowledged when the person is more capable of viewing himself and others as individuals; when he can be more flexible under stress and can seek various outlets for gratification. Change is the recognition of capabilities and limitations. It is an increased level of activity and productivity. Basically there is an improved sense of self, object relationships, sense of reality, an ability to test reality, and to learn from experience, both personal and from others. There is an emphasis on substituting more effective defenses in place of more primitive ones. Sublimation of basic drives is the ultimate aim.[2, 9]

To assess a patient's progress, a simple, six question, rating inquiry is used. Against a background of substantial collateral data and in the course of a group session, the ensuing questions are directly and indirectly asked: (1) How is the patient feeling? (2) How is the patient getting along with his family, parental and/or marital? (3) Does the patient work: either at home, around the house or at a job? (4) Does the patient visit friends, neighbors and relatives and does the patient have friends and relatives visit him? (5) What does the patient do to have fun?[3] (6) Is the patient taking the medicine according to prescription? (All patients are told the name of and reason for their drugs.)

As with any mental health agency or resource, there is always the built-in pitfall that the patient's mental health will become dependent on his association with the agency. In order to partly avert this kind of phenomenon, we are experimenting with a second kind of group which is supervised by the psychiatrist, but is directly conducted by the nurses.[4] Depending on the patients' progress in this second group (so far the results are impressive), a third kind of group will be instituted. This group will be composed exclusively of patients.

Family Therapy

The family proper and the extension of the family as embodied in community resources are also regarded as therapeutic, that is, change producing in nature. Customarily, when an appointment notice is mailed to the index patient, the notice bears the request that the patient bring his or her family along to the Aftercare Clinic. Patients who do not respond to the notice are sought by the Public Health nurses. When the index patient group meets, one of the Public Health nurses meets with the family members who also convene as a group. The nurse facilitates ventilation revolving around critical areas of patient-family interaction. This has proved very helpful to the patient and to the family. Following the group meetings, should the need arise, family sessions are then held.[1]

Individual Therapy

This mode is generally used when a crisis emerges and when the patient's personal and community stability is in jeopardy. Oftentimes individual, group and brief family therapy are combined. Knowing how useful family and friends can be when the patient is under stress every effort is made to draw them into the situation. In the absence of relatives or their cooperation, the Public Health nurses will

render on-going support through home and clinic visits. These contacts frequently take on the form of day and night crisis interventions.

Community Resources

Depending on the character of the patient's needs all available community resources are utilized. There is the ceramic shop, Alcoholics Anonymous (only recently established in one county), Senior Citizens, church groups, Vocational Rehabilitation, Sheltered Workshop, ministerial counseling, members of local Mental Health Associations, etc.

Statistics

The combined patient population treated at both Walton and Barrow counties totalled 209. This figure does not include the immediate family and other relatives counseled for supportive and preventive purposes. The average number of patient visits was four. As previously indicated the majority of these patients carry a psychotic diagnosis with a minority having organic brain syndrome, neurotic, addictive and MR diagnoses. From December 1970 to December 1971, 11.4 per cent of these patients were rehospitalized one or more times. One quarter of them were alcoholics. The rest were rehospitalized because of the exacerbation of psychotic disorders.

Conclusion

Though the staff of the Aftercare Clinics entered upon a project with strong emphasis on the group approach with some misgivings, this modality has proven to have many advantages accruing both to the patient and staff.

Indeed we are not merely maintaining patients in a post-discharge condition. As displayed both in and outside the groups, we are helping them alter their life styles to more fully meet their needs. In accordance with criteria listed above regarding personal, familial, social and industrial accommodations, approximately 40 per cent of the patients have made gains in these spheres.

The combination of psychiatrist and Public Health nurses involving themselves concomitantly in all forms of treatment has had for us an educational effect. We have learned from our successes as well as from our failures. The professional transactions have been especially gratifying.

The low rehospitalization rate (11.4 per cent) amply endorses the worth of the approach. Matched against nationwide data for the rehospitalization of post-mental-hospital patients, we fare quite favorably. The national incidence of psychiatric rehospitalization is 50 per cent for a given year and a given population.[8]

Over a period of 12 months of development, the Aftercare Clinics, with increasing rapprochement to community resources, have gradually acquired a reservoir of experience. The clinics are also becoming a center from which appropriate referrals can be made.

We like to believe that though the system in both counties works, a system with distinct variations according to county, we also like to believe that the patient's wants, staff experience and community resources are factors that will continually influence the system. We want to keep it susceptible to change in hopes of further lowering the rate of rehospitalizations. Of greater significance is our desire to provide a more responsive opportunity for the patient to change in the interest of his personal gratification within his community.

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BIBLIOGRAPHY

1. Bateson, G. and Reusch, J.: *Communication: the Social Matrix of Society;* New York, Norton, 1951.
2. Bellak, L.: The schizophrenic syndrome: In Bellak, L. (Ed.): *Schizophrenia: a Review of the Syndrome;* New York, Logas Press, 1958.
3. Davidof, Ida F.: Mental health rehabilitation worker; *Com. Men. Health J.* 5:46 (Feb.), 1969.
4. Dean, S. R.: The role of self-conducted group therapy in psychorehabilitation: a look at recovery incorporated; *Am. J. Psych.* 127:934 (Jan.), 1971.
5. Goodnick, Irwin: The psychiatric day center in the treatment of the chronic schizophrenic; *Am. J. Psych.* 128:485 (Oct.), 1971.
6. Grinspoon, L., Ewalt, J. R. and Shader, R.: Psychotherapy and pharmacotherapy; *Am. J. Psych.* 125:124 (Jun.), 1968.
7. Liberman, Robert: Reinforcement of cohesiveness in group therapy; *Arch. Gen. Psych.* 25:168 (Aug.), 1971.
8. Silverstein, Max: *Psychiatric Aftercare: Planning for Community Mental Health Services;* Philadelphia, University of Pennsylvania Press, 1968.
9. Slavson, S. R.: *An Introduction to Group Psychotherapy;* New York, Commonweal Fund, 1943.
10. Small, L.: *The Briefer Psychotherapies;* New York, Brunner/Mazel, 1971.
11. Schwartz, E. K.: The trend to grouping; *Inter. J. Psych.* IX:211, 1970.
12. Schwartz, E. K.: Why group therapy now?; *Psych. Ann.* 2:26 (Mar.), 1972.
13. Wolberg, Lewis R.: Reeducative group therapy: In *The Technique of Psychotherapy;* 2nd Edition, New York, Grune and Stratton, Inc.; I:137, 1967.

This unusual hazard of dog shearing has previously been reported in sheep shearers.

Pneumonic Tularemia Following the Shearing of a Dog

CHARLES T. RUMBLE, M.D., *Forsyth*

On June 3, 1970, a 14-year-old boy assisted in the shearing of a German shepherd dog. On June 6 he developed fever and was seen by a physician, who found some throat infection. The physician prescribed 500 mgm. t.i.d. of penicillin, for 10 days.

Fever continued and was associated with anorexia. When he was brought to me for examination on June 12, 1970, he had a fever of 100.4 and normal P.E., except for slight throat infection. I suggested that he finish the penicillin and be observed for any changes in symptoms, etc.

Fever continued and when I saw him on June 20, 1970, he had developed some cough and substernal discomfort. His temperature was 100.0, he had had no dyspnea nor pleuritic pain and again his P.E. was normal—no rales, suppression of breath sounds, nor anything else. A C.B.C. revealed 14.1 gm. Hb., 10,350 W.B.C. with 70 P., 20 L., 4 M., 4 E., 2 stabs, and ample platelets.

The following day his mother called to report a temperature of 104.5 and a rash that was said to be red, which would not blanch on pressure. He was admitted to the hospital, but the rash which I had assumed petechial was maculo-papular on lower legs, forearms and glabrous skin of chest. Again, the remaining P.E. was normal. A work-up for pyrexia of unknown origin was started, with blood cultures, chest x-ray, chemical profile, febrile aggl., blood count, and urinalysis.

Chest x-ray showed a soft infiltrate in the right upper lobe—no effusion nor hilar mediastinal adenopathy. This was interpreted as being either T.B. or pneumonia. A subsequent T.B. skin test was negative.

Anaerobic and aerobic blood cultures were negative. Aggl. showed Proteus 0 × 19 positive 1:40 and Tularemia positive 1:160. The W.B.C. had dropped to 6,400.

He was placed on Tetracycline 500 mgm. q. 6 hours, and temperature was normal within 48 hours. Fever did not return.

The patient was sent home on Tetracycline in reduced dose and chest x-ray and febrile aggl. were repeated in two weeks. X-ray showed some improvement in the pneumonia, with no cavitation seen. The aggl. still showed Proteus 0 × 19 positive 1:40, but the Tularemia titre had risen to 1:5120.

I assume this represents the inhalation type of pneumonic tularemia from the aerosol of tick feces which he inhaled while shearing the dog. This type of pneumonic tularemia has been reported in sheep shearers.

Since the aggl. titres of tularemia sometimes rise rather slowly, one wonders how many cases of "viral pneumonia" may perhaps be this same type of infection. Also, if the first physician had happened to give a drug to which the infection was sensitive, this diagnosis would not have been made.

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The American Medical Association and You

WILLIAM A. SODEMAN, M.D., F.A.C.P.,† *Philadelphia, Pa.**

One often hears the questions "What does the AMA do for me?" "Why should I be part of organized medicine as represented by the AMA?" Answers frequently include trite cliches which stamp the AMA as an organization apart from our personal interests—it attempts to control numbers of physicians; it opposes basic needed reforms in medical practice; it is not responsive to public need, etc., etc. Although such statements are largely false, they do, indeed, convey the image of the AMA as basically a political organization. Again, this is untrue. Let us look into some of its, the AMA's, activities.

May 7, 1972, was the 125th anniversary of the founding of the AMA. This event took place in the hall of the Academy of National Sciences of Philadelphia in 1847. The purposes stated were "for cultivating and advancing medical knowledge; for elevating the standard of medical education; for promoting the usefulness, honor, and interests of the medical profession; for enlightening and directing public opinion in regard to the duties, responsibilities and requirements of medical men; for exciting and encouraging emulation and concert of action in the profession; and for facilitating and fostering intercourse between those engaged in it."

In essence the goals set by the founders were primarily *to increase medical knowledge, to improve medical education,* and *to further medical ethics.* These remain the fundamental bases for AMA policy and action, and in each of these areas everyone of us should not only lend support but should participate to ensure those benefits to the profession, to our own practices, and to the public. In these areas what does the AMA do for us? Let us look at several examples.

In the furtherance of medical knowledge, the AMA carries out a multiplicity of activities to the benefit of each and every practitioner in the United States. The *Annual Session* and the *Clinical Session* are two of the most important, and the largest, of continuing education endeavors. There is "something for everybody"—internist, surgeon, dermatologist, etc. The scientific exhibits are an education in themselves, and alone are worth attendance. The meetings supplement and do not substitute for specialty society meetings. And the reverse is true. In another area we find *JAMA* and the constellation of *specialty journals,* the Archives of Internal Medicine, Archives of Surgery, etc., which run the gamut of all specialties. All members are entitled to the *JAMA plus* a specialty journal. If they but read both of these, there is little of interest which they will miss in their field of practice.

The AMA remains the country's greatest "updater" in medical knowledge and along with the activities of the ACP, its journals, meetings and courses, can keep the internist well abreast of the field.

In medical education generally, the AMA has carried the responsibility for quality standards since its founding. In 1907 the Council on Medical Education was established, and the most profound effect in raising standards of medical education resulted from the Flexner report of 1910, again an AMA activity in cooperation with the Carnegie Corporation. More recently the AMA has justifiably shared its responsibilities in medical education with the AAMC at undergraduate level, and with the various specialty societies at graduate level. Most recently it has extended these efforts with other groups into allied health education and into continuing education. It has spearheaded the development of an overall Commission on Medical Education, an effort resulting from the Millis Commission Report, another AMA activity. The quality of the residencies in Medicine, for example, have been maintained and bettered in concert with the ACP. The quality base for every internist who has gone through such a residency rests in activity of the AMA working with the ACP in the Residency Review Committee. Likewise the standards and quality base represented by the American Board of Internal Medicine rest on similar endeavors.

Every internist who has evolved through these processes owes a debt to the AMA and ACP for the quality of his education as an internist and, as

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stated above, can maintain his adequacy through the continuing educational activities of both groups.

Look at those certificates on your wall. AMA and ACP are responsible for your having them there, and for their meaning. It is difficult to understand why an internist does not insist on being an AMA member as he should insist on being a part of the ACP.

The same endeavors described above maintain in the other specialties as well as in the major fields of allied health. Most recently the AMA, in bringing together the ACP, ASIM, and AAFP, established standards for education of the Assistant to the Primary Care Physician and is carrying this activity further to establish examinations for certification of such individuals. Again, the AMA led the way, along with ACP, in establishing these educational standards.

These are but a few of AMA activities which touch the internist personally. Such endeavors continue. We all should support them and be part of them.

In the field of ethics, little need be added regarding AMA activities. It has, since 1847, carried the load in this field for all of us. Seldom do we think of this area unless it touches us personally. But we never know when this will happen, and if it does, the AMA is there to help adjudicate our problem.

There are many other areas related and unrelated to the above in which the AMA participates with vigor and in which we have a personal stake —matters of licensure, the current difficulties in malpractice insurance, other medicolegal problems, evaluation of drugs, food and nutrition services, mental health problems, automotive safety, and a host of others. These basic functions of the AMA are not generally newsworthy for the public; the controversies in Washington are. And these basic functions we need, individually and collectively. We all have an obligation to be part of the basic functions of AMA. As an organization, ACP relates to the AMA and would be derelict in its duties if it did not; as individuals we are also derelict if we do not participate as members of the AMA, and in turn if we do not we are also doing a disservice to ourselves.

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AMERICAN RHEUMATISM ASSOCIATION MEETING

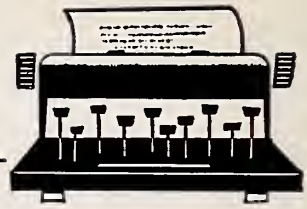
A one and a half day scientific meeting of the American Rheumatism Association Section of The Arthritis Foundation will take place at the Pittsburgh Hilton Hotel on December 8 and 9, 1972.

On Thursday, December 7, the traditional scientific workshops of one-half day each will be presented. The morning session is entitled "Virus Induced Transformation of Normal Cells: Lessons from Cancer Research." In the afternoon two concurrent sessions will cover "Genetic Mucopolysaccharide Storage Diseases (Mucopolysaccharidoses)" and "The *Real* Collagen Diseases." Registration fee for each session is $25.00.

An innovation (also on Thursday) will be six clinical postgraduate seminars on arthritis, directed at practicing physicians and conducted by distinguished leaders in the field. The seminars will be two hours each with two running concurrently. Registration is limited to 30 persons per seminar and the fee is $20.00 each. Topics are: "Radiology of Rheumatoid Arthritis," "Laboratory Techniques in Rheumatic Disease," "The Management of Septic Arthritis," "The Examination of Renal Involvement in Connective Tissue Disease," "Ocular Syndromes in Rheumatic Disease" and "Office Rehabilitation in Rheumatic Disease."

For further information contact Miss Lynn Bonfiglio, Executive Secretary, American Rheumatism Association Section, The Arthritis Foundation, 1212 Avenue of the Americas, New York, New York 10036.

EDITORIALS



J. Frank Walker—Mr. Speaker of the House

When J. Frank Walker of Atlanta takes the gavel to preside over the House of Delegates at the American Medical Association Clinical session next month in Cincinnati, he will represent Georgia's first speaker of the House. Not since J. Edgar Paullin served as President of the American Medical Association in 1943-1944 has the Georgia delegation had so powerful a voice in the affairs of organized medicine.

Since beginning the practice of radiology in 1953, Dr. Walker's involvement with organized medicine, civic, religious and professional affairs has been phenomenal.

Beginning in 1961, he was speaker of the Medical Association of Georgia House of Delegates, where he served until 1968. Since 1965, he has been a delegate to the American Medical Association. In 1967, he served as Chairman of the Board of the Fulton County Medical Society and in 1969 was installed as president of that society. From 1969 until June 1972, he has been Vice Speaker of the House of Delegates of the American Medical Association. From 1962 to 1965, he was president of the Fifth District Medical Society. He is a past president of the Atlanta Clinical Society.

Since 1961 he has served as Chairman of the Committee on Legislation of the Medical Association of Georgia and since 1971, he has been a director of the Georgia Medical Political Action Committee.

He is President of Medical Association of Georgia Foundation, a Delegate to the World Medical Association, and holds an appointment as clinical associate Professor of Radiology at Emory University School of Medicine.

As if these activities were not a sufficient contribution, Dr. Walker has served as President of the Atlanta Radiological Society, President of the Georgia Radiological Society, Chairman, Board of Chancellors American College of Radiology and President of the American College of Radiology.

He has served as President of the Emory Medical Alumni Association, President of the Emory University National Alumni Association, Board of Visitors Emory University and Board of Counselors, Oxford College.

He serves as an Elder in the First Presbyterian Church of Atlanta and as President of the Peachtree Civitan Club. He is a member of the Board of Directors of the Atlanta Convention Bureau and is a member of the Atlanta Rotary Club.

The above listings are incomplete. With all these voluntary activities, Frank Walker continues to carry on a full-time radiologic practice.

Dr. Walker is representing our state and our doctors in the finest tradition. He deserves our congratulations and our continued support. Let us hope that his example of service and devotion to activities over and beyond the basic practice of medicine may stimulate many of us to go that extra mile toward widening our vistas of service to our patients, and toward the betterment of our honored profession.

E.W.

MAGNET Conference Scheduled

SELDOM IS THERE A MEETING so timely or of such importance that it warrants being recommended to the full MAG membership. Let me tell you about one that is. MAGNET!

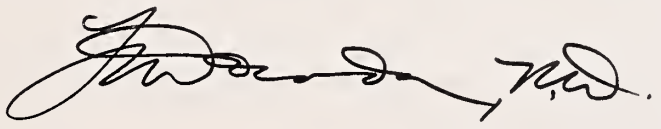
The MAG New Educational Training (MAGNET) Conference is designed to "detail" the physician on the full scope of problems that must be dealt with both locally and at the MAG level. The 1972 Conference will zero in on the most pressing legislative problems confronting the profession. In addition, it will devote a portion of the meeting to the business of running a county medical society—1972 style.

Participants on the program will include Senator Herman Talmadge; Mr. Ralph Lee Smith, author of "At Your Own Risk," a devastating exposé of chiropractic; Dr. Joseph Sabatier, New Orleans, Chairman of the AMA Committee on Quackery; professional lobbyists for the AMA and others with equally impressive credentials.

The Conference will be held on November 11-12 (Saturday-Sunday) at the new Stouffer's Atlanta Inn. If you can attend—and you should consider this the one really "must" meeting of the year—please contact MAG Headquarters and a completed program will be sent to you.

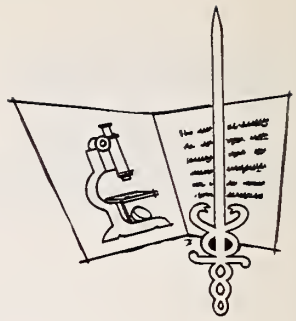
On Saturday evening there will be a complimentary cocktail party at the Stouffer's Inn and on Sunday the Falcons play the New Orleans Saints at the Atlanta Stadium. The Conference will be concluded in time for you to make the kickoff.

I want to urge that you make every effort to attend. The time has come when the medical profession must "get down to cases" and begin to deal effectively with the myriad problems that confront it. MAGNET is the place to begin.



F. W. Dowda, M.D.
President, Medical Association of Ga.

CANCER PAGE



THE NEGLECTED RECTUM AND COLON

JAMES J. MCDONALD, M.D., *Athens*

I RECENTLY HAD THE IDEA for the Medical Record Department to record the number of rectal examinations and sigmoidoscopic examinations performed at St. Mary's Hospital and at Athens General Hospital for a period of one month. This study involves the month of July, 1972. We had 668 admissions to St. Mary's Hospital with 128 rectal examinations, four sigmoidoscopic examinations and five barium enemas. At the Athens General Hospital we had 609 admissions with 139 rectal examinations.

From these figures it is obvious that we need to include this important area in our complete physical examinations. It is interesting that the percentage of rectal examinations are about the same for both hospitals. It would seem that with all the publicity and encouragement from the American Cancer Society that doctors would accept their responsibility to carry out routine rectal examinations and certainly sigmoidoscopic examinations if the patient has the least sign or symptom of a lesion of the rectum or colon.

There are many types of palpable benign rectal and lower colon tumors such as papillomata, adenoma, angiomata, fibroma, myxoma, lipoma, neuroma and villous papillomata. The most common, of course, is the simple adenomatous polyp. Some of the complaints are mucous discharge, bleeding, incomplete evacuation and tenesmus. It has been estimated that 7 per cent to 20 per cent of the general population will have benign polyps.

In studying the literature, about 30 per cent to 35 per cent have undergone malignant change when they are removed. Sixty-five per cent of the patients with polyps will have no symptoms. The most common symptom is bleeding from the rectum and this is often a very late finding. These polyps should be totally excised to determine if malignant degeneration has taken place. Frequent benign polyps are associated with malignant lesions of the lower rectum and colon.

If a polyp or polyps are found with rectal examination or sigmoidoscopic examination, the patient should immediately have Barium Enema and contrast studies to rule out further lesions of the colon.

It has been estimated that approximately 12 per cent of all malignant tumors of the human body originate in the anus, rectum and sigmoid colon and that 80 per cent of all intestinal cancer is located in this area. This reveals the importance of adequate studies of this area.

Another interesting item is that patients with malignant lesions of the rectum and sigmoid colon survive much longer than those with other cancer of the G-I tract.

While cancer is most often considered a disease of middle and later life one should not have a sense of security just because they are young. We recently had

a case of a far-advanced cancer of the sigmoid in a pretty, 27-year-old mother. The patient recently gave birth to her third child and bled a great deal during her pregnancy. Pregnant women bleed from the rectum from other causes besides hemorrhoids. This is, again, a red light signal for rectal examination and sigmoidoscopic examination.

In conclusion I would like to stress the extreme importance of thorough examination of the patient in regards to rectal complaints and also the routine examination of this area with physical examinations. It is gratifying to know that most of the large clinics routinely do sigmoidoscopic examinations and are therefore diagnosing silent lesions.

740 Prince Avenue 30601

CARDIOVASCULAR AREA FACILITIES

PAUL E. CUNDEY, JR., M.D., ***Augusta***

THE PRESENT EPIDEMIC of coronary heart disease and related vascular disorders is all too evident in Georgia. In 1968, heart disease alone accounted for 32.4 per cent of all Georgia deaths and, when combined with cerebrovascular disease, for 48.3 per cent of the total deaths. The many health, social and economic ramifications are incompletely understood, but obviously great.

To combat this rapidly advancing epidemic, the Georgia Regional Medical Program devised and implemented a multi-phased effort. Perhaps the most immediate benefit to the state's patients and physicians is a network of cardiovascular area facilities. The facility concept has as its avowed purpose to offer programs in prevention, diagnosis, treatment, rehabilitation and education. These facilities will hopefully concentrate skills and resources which would be impractical for each community hospital to possess. Such area facilities are now in operation in Athens, Atlanta, Augusta, Columbus, Savannah, Thomasville and Tifton. Practical results have been generated in a short period of time. Coronary Care Units now exist in small community hospitals unable to develop these resources previously. Stress testing is being carried out across the state in these units. Programs in dietary education, smoking clinics, hypertensive screening and cardiac rehabilitation are also in operation.

Much remains to be done. The Georgia Heart Association is in the process of up-dating the facilities of the Georgia Heart Clinic system. Many of the heart clinics have or will combine with an area facility to offer complimentary services. In areas where a cardiovascular facility is not established, the present Georgia Heart Clinic will be encouraged to broaden its activities. Financial assistance will be offered to enable the clinic to offer improved diagnostic services. Increased emphasis will be placed on early detection, prevention and education of allied health professionals. County Heart Units, with large numbers of dedicated volunteer workers, will be increasingly involved in community-type programs other than fund raising.

The concept of area facilities has moved to reality in the last 24 months and a beginning has been made. For future progress, the cooperation of all Georgia physicians interested in cardiovascular disease will be needed.

1132 Druid Park Avenue

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

RESTRICTIVE EMPLOYMENT AGREEMENTS

J. WINSTON HUFF, *Atlanta**

An established physician or group of physicians frequently have need to employ an additional physician in order to cover a growing practice. The employer-physician has a legitimate interest in protecting the practice he has built in the event the new association does not work out. How may this be accomplished?

One way is an agreement by the employee-physician not to compete with his former employer after the relationship is terminated. Not infrequently the newly-hired physician is required to sign a contract in which he agrees to restrict his professional activities in such event. In general these contracts prohibit the employee-physician from practicing medicine (or a particular specialty) within a certain geographical area for a specified length of time.

This article will try to cover the general legal principles involved in restrictive employment agreements. We have here, however, a somewhat complicated field of law, and, in addition, it has been constantly developing in recent years. Therefore the physician, whether employer or employee, should consult his attorney before he signs a contract containing such restrictive provisions.

The courts, in passing on these agreements, have had to resolve a basic conflict. On the one hand the employer has a valid interest in restricting the employee from using confidential information and close association with patients gained from his employment as the basis for the establishment of a competing practice. On the other hand, it is against ancient public policy to prevent completely any person from earning a livelihood in his chosen work. These conflicting principles are present whether the work involved is that of a doctor of medicine or a laundry route salesman. Some of the judicial decisions in other states hold that this conflict is more acute in the case of the professions where the person involved has spent many years in educating and training himself and thus is not as flexible in finding work in other fields. While most of the cases carried to the courts involve business and commercial careers rather than medicine, thus far in Georgia the same judicial reasoning has been applied to both.

The basic standard used by the courts in resolving all cases involving restrictions on employment has been that of "reasonableness." If the court determines the restrictions are reasonable, the contract will be upheld; if not, it will be struck down. Generally the courts have tested reasonableness by the following four criteria, all of which must be met:

1. The activity prohibited must be sufficiently described. As late as 1965 the Georgia Supreme Court held that a contractual restraint against "engaging in the practice of medicine and surgery" was sufficiently definite. Since 1965, however,

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** Prepared at the request of The Medical Association of Georgia. Mr. Huff is a partner in the firm POWELL, GOLDSTEIN, FRAZER & MURPHY, General Counsel to the Association.*

the Georgia appellate courts have become much more strict in this area. A prohibition against the "practice of medicine as defined in Section 84-901 of the Code of Georgia Annotated" should be sufficient. If the practice of a specialty only is to be prohibited, it should be described with precision.

2. The employer must have a legitimate reason for imposing the restriction. He must show a valid interest (i.e. the practice he has built) to be protected by the contract.

3. The territorial limitation cannot be too broad. Restricting the employee in an area usually covered by a medical practice (a city or county) will probably be upheld. Larger areas may subject the agreement to attack.

4. The time during which the restrictions apply cannot be long. In years past restrictions in medical agreements up to 10 years have been sustained. Here again, recent court decisions indicate a stricter view, and restrictions lasting more than two or three years would probably be dangerous.

An additional factor should be mentioned. If the termination of employment on the part of the employer is clearly inequitable or unreasonable, the agreement will quite likely not be enforced.

Reasonably effective restraints may be imposed to protect the employer-physician. However, it is imperative that the contract be carefully drafted in the light of then existing statutory and case law.

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NOVEMBER / 1972
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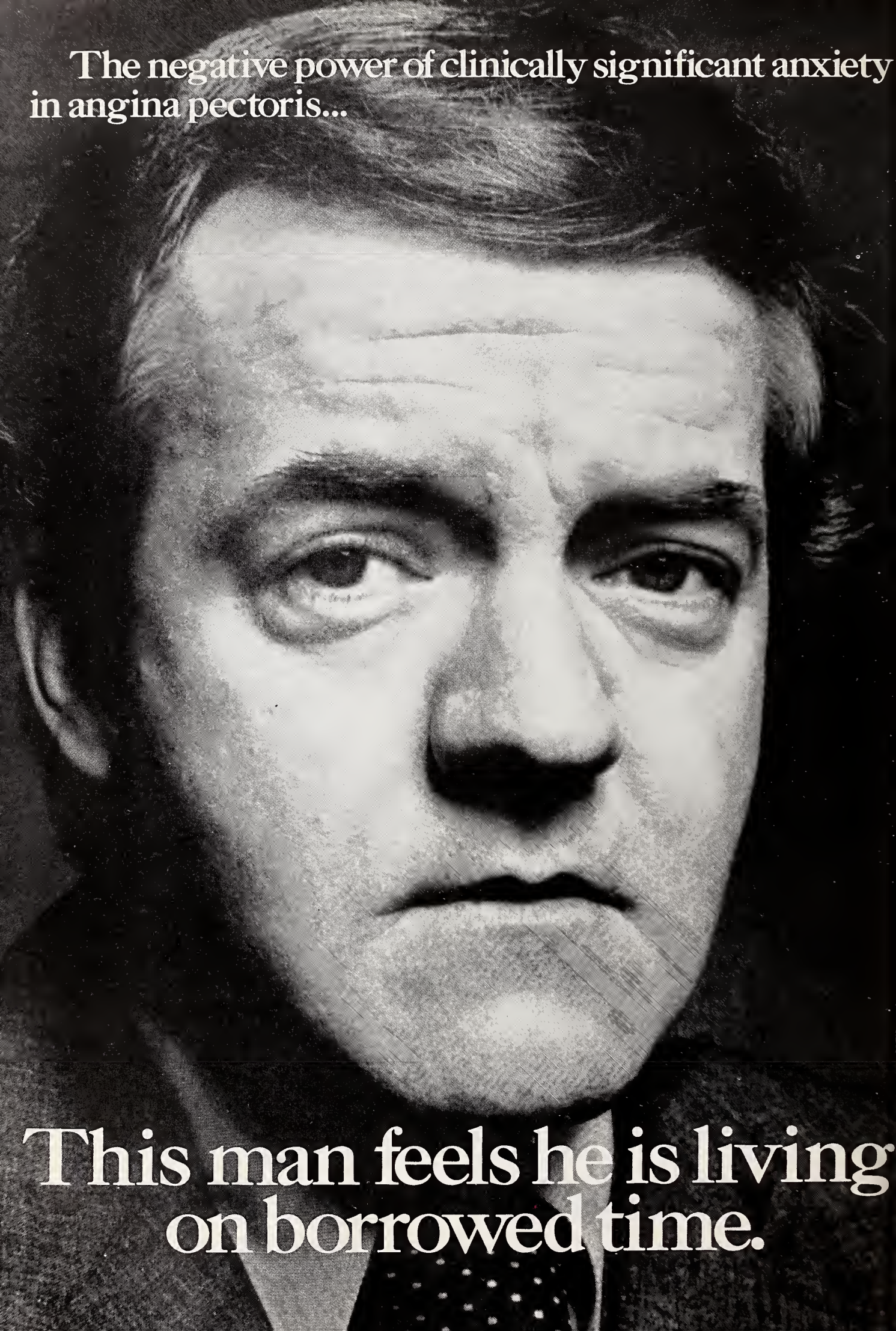
"Double-Bubble": Sign of Duodenal Obstruction / See Page 367

The negative power of clinically significant anxiety in angina pectoris...



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NOVEMBER 1972 *Volume 61, Number 11*

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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Contents

Cover

Roentgenogram of duodenal obstruction in the neonate is one of five illustrations accompanying the article by Robert A. Parrish, M.D. Layout by Atlanta artist Bob Hamill.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

High and low obstruction of the gastrointestinal tract, respiratory distress and abdominal wall defects are the categories discussed.

Gastrointestinal Emergencies in the Neonate

ROBERT A. PARRISH, M.D.,* *Augusta*

Approximately two infants out of every thousand live births will require urgent surgery. Since these problems are often recognized in one hospital and definitive therapy carried out in another hospital, prompt diagnosis and proper transport become imperative.

During transport in patients with intestinal obstruction, esophageal atresia and diaphragmatic hernia, it is necessary to insert a short nasogastric with multiple portholes in the distal 2 inches and aspirate frequently with a syringe in order to prevent vomiting, aspiration pneumonia and bowel distention. Infants with T-E fistula should be maintained in a semi-upright position to help prevent regurgitation of acid gastric contents into the lungs by way of the fistula.

Administration of oxygen en route to the hospital may prevent anoxia with subsequent cardiac arrest and brain damage. Maintenance of a normothermic state is of great importance as it has been demonstrated that severe acidosis may rapidly develop in hypothermic infants, especially the premature baby. The newer portable isolette admirably provides these functions.

Intestinal obstruction is the most frequent gastrointestinal emergency which requires surgery during the neonatal period. Early recognition will decrease the mortality noted where surgery is delayed. Maternal hydramnios, bilious vomiting, abdominal distention, and failure to pass meconium or obstipation are four major clues suggestive of intestinal obstruction (Table 1).

TABLE 1
MAJOR CLUES OF INTESTINAL OBSTRUCTION IN THE NEONATE

Maternal hydramnios
Bilious vomiting
Abdominal distention
Failure to pass meconium—obstipation

Maternal Hydramnios: High intestinal obstruction is seen in about 25 per cent of cases of maternal hydramnios. Amniotic fluid is continuously swallowed by the fetus and absorbed through the gastrointestinal tract. In high intestinal obstruction this absorptive surface is decreased, therefore excessive amounts of amniotic fluid accumulates. Low intestinal obstruction does not usually produce hydramnios.

Bilious Vomiting: With the exception of esophageal atresia, obstruction proximal to the ampulla of Vater is rare. Although bilious vomiting may accompany functional ileus of the premature, pneumonia, sepsis, or central nervous system disorders, its presence is indicative enough of mechanical intestinal obstruction to demand prompt investigation.

Abdominal Distention: Generalized distention usually is suggestive of low intestinal obstruction although at times this finding may be overshadowed by respiratory distress produced by severe upward displacement of the diaphragm. Severe protracted vomiting may prevent the appearance of abdominal distention especially in cases of high bowel obstruction.

Failure to Pass Meconium or Obstipation: The full-term infant should pass stools in 24 hours and the premature by 48 hours. By this time other features of obstruction such as distention and vomiting are usually present. Since meconium distal to an obstruction can be passed during this time interval,

* *From the Department of Surgery, Section of Pediatric Surgery, Medical College of Georgia, Augusta, Georgia 30902.* *Presented at the 118th Annual Session of the Medical Association of Georgia, May 11-14, 1972 in Macon, Georgia.*

passage of small amounts of inspissated meconium should be considered abnormal.

Gastrointestinal emergencies in the neonate can conveniently be thought of in four categories according to the mode of presentation (Table 2):

1. Respiratory distress (diaphragmatic hernia, tracheo-esophageal fistula, spontaneous perforation of the G.I. tract).

2. High obstruction of the gastrointestinal tract (duodenal atresia, duodenal stenosis, annular pancreas, and malrotation with duodenal obstruction with or without midgut volvulus).

3. Low obstruction of the gastrointestinal tract (jejuno-ileal atresia, meconium ileus, Hirschsprung's disease, and ano-rectal atresia or stenosis).

4. Abdominal wall defects (omphalocele, gastroschisis, and incarcerated inguinal herniae).

TABLE 2

MAJOR CATEGORIES OF G.I. EMERGENCIES BY MODE OF PRESENTATION

Respiratory distress
Diaphragmatic hernia
Tracheo-esophageal fistula
Spontaneous perforation of the G.I. tract
High obstruction of G.I. tract
Duodenal atresia or stenosis
Annular pancreas
Malrotation of colon with duodenal obstruction
Low obstruction of G.I. tract
Jejuno-ileal atresia
Meconium ileus
Hirschsprung's disease
Ano-rectal atresia—stenosis
Abdominal wall defects
Omphalocele
Gastroschisis
Incarcerated inguinal hernia

Respiratory Distress

Diaphragmatic Hernia: Patients with this problem usually present within 24-48 hours of life with symptoms of respiratory inadequacy. Cyanosis may be present immediately after birth or may not develop until later as a result of dilatation of that part of the G.I. tract present within the chest. Dilatation of herniated loops of intestine results in progressive compression of the lung, a shift of the heart and mediastinum to the opposite side with compression of the contralateral lung. The majority of these hernias occur through a defect in the posterolateral part of the left diaphragm. Physical examination usually reveals distant breath sounds on the affected side, bowel sounds over the chest, heart sounds best heard on the side away from the hernia, and a scaphoid abdomen (Table 3). A definitive diagnosis

TABLE 3

PHYSICAL EXAM—DIAPHRAGMATIC HERNIA

Distant breath sounds
Bowel sounds over chest
Heart sounds best heard right chest
Scaphoid abdomen

can usually be made from a plain A-P roentgenogram of the chest with loculations of gas representing loops of bowel above the diaphragm with the lung partially or completely collapsed and a mediastinal shift (Figure 1). Rarely there may be some difficulty in differentiating these loculations from a congenital lung cyst. If any doubt exists as to the etiology of the air filled spaces, a small amount of water soluble contrast agent placed via the nasogastric tube will identify the bowel within the chest. Needle aspiration of the thoracic cavity is dangerous and should be condemned.

Management of this condition consists of relief of the respiratory distress by decompression of the gastrointestinal tract with a nasogastric tube and placing the infant in a semi-upright position with the affected side down while oxygen is administered.

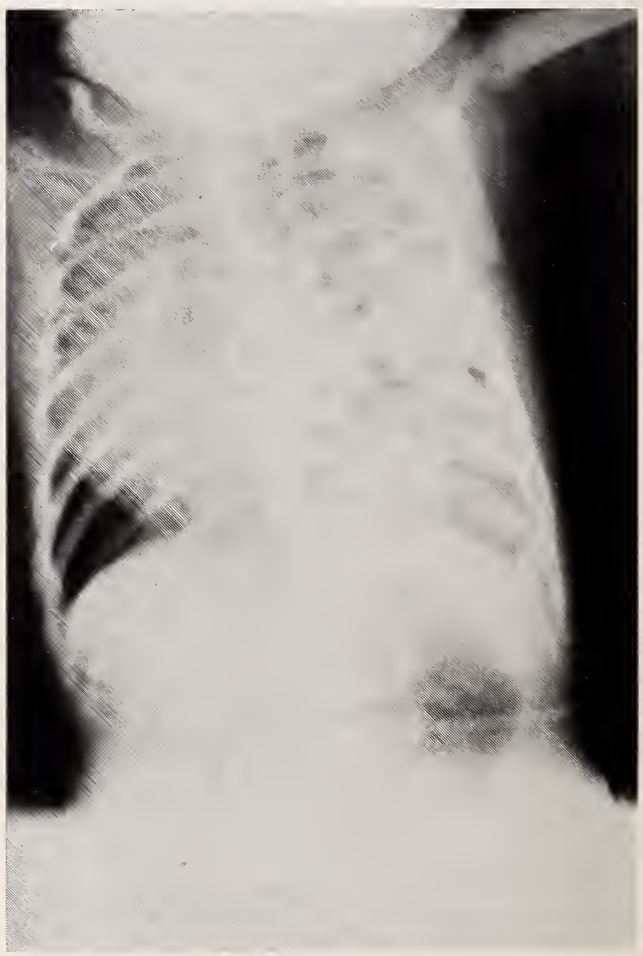


FIGURE 1

Chest roentgenogram showing loculations of gas-filled bowel above diaphragm and mediastinal shift.

The key to success is early operation. The abdominal approach has the advantage of thorough exploration for the presence of associated obstructive anomalies. In addition, when the abdominal cavity is too small to accommodate the herniated contents a silastic prosthesis can be placed for abdominal wall closure or the skin alone may be used for closure.

Tracheo-esophageal Fistula

About 90 per cent of the congenital anomalies of the esophagus are characterized by a blind pouch of the upper esophagus with a fistulous communication of the lower esophagus and the trachea near its bifurcation. Usually the first clue to diagnosis is excessive mucus seen around the mouth. With the first feeding the triad of choking, coughing, and cyanosis becomes apparent. Respiratory distress rapidly ensues as a result of pneumonia and atelectasis. Inability to pass a catheter to the stomach coupled with visualization of the blind pouch with roentgenograms using a water soluble agent establishes the diagnosis. Air will usually be seen throughout the G.I. tract on x-ray. Preoperative management should include repeated suctioning of the upper pouch using a replogle catheter, elevation of the head and chest to 20° with oxygen to the infant in an isolette. Parenteral maintenance fluids and antibiotics are started and immediate gastrostomy regardless of the patient's condition should be done. Recent studies have shown that staging the surgical correction of this condition yields better results in high-risk patients, such as small prematures and those having associated anomalies or severe pulmonary involvement.[3] In the full-term infant with severe pneumonia such a staging would consist of an emergency gastrostomy under local, treatment of the pneumonia with antibiotics and then extrapleural division of the fistula and esophageal repair within two to three days. For the extreme premature immediate gastrostomy followed by extrapleural division of the fistula may be done with the definitive repair of the atresia being delayed until the patient reaches six or seven pounds weight. Definitive surgery can usually be done in 85 to 90 per cent of cases. In the usual type being discussed the extrapleural approach yields the highest survival rates.

Spontaneous Perforation of the Gastrointestinal Tract

Although 60 per cent of neonatal G.I. perforations involve the stomach or duodenum, perforations in other parts of the intestine present in the same fashion and current evidence would suggest a common etiology. In most reported series the majority of infants had suffered an asphyxial insult at birth.[4] The current popular hypothesis is that in response to asphyxia, there is a selective ischemia in the intestinal tract to protect the brain and heart. Persistent spasm in the mesenteric circulation leads to acute ulcerations, bleeding and/or perforation. This sequence is also thought to lead to other conditions in the newborn such as "stress" ulcers and necrotizing enterocolitis.

The important point is that of awareness of the entity and its prompt correction by early operation. Nearly all patients with spontaneous perforation of the gastrointestinal tract exhibit the acute onset of massive abdominal distention associated with respiratory difficulty. If, in addition, any form of resuscitation or intubation was performed the diagnosis should be strongly suggested.[5] Absent liver dullness is almost always found and diagnosis can be quickly confirmed by an upright x-ray of the abdomen which shows a massive pneumoperitoneum of a characteristic pattern which we call the "saddle-bag" sign (Figure 2).

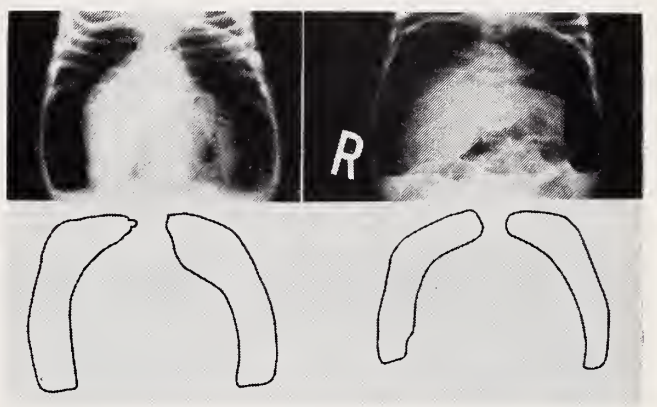


FIGURE 2

Characteristic "saddle-bag" configuration of pneumoperitoneum in spontaneous rupture of the stomach in the newborn.

High Obstruction of the Gastrointestinal Tract

The most common causes of high intestinal obstruction at birth include duodenal atresia, duodenal stenosis, annular pancreas, and duodenal obstruction secondary to malrotation of the colon with or without midgut volvulus. The first three entities may, for practical purposes, be considered together as they typically produce the same symptoms, physical, and x-ray findings and are corrected by the same operative procedure. Some vomiting is present in the first day of life and in over 90 per cent of cases is bile stained. Abdominal distention depends upon how much vomiting has occurred but when present is limited to the upper abdomen. Stools may be absent or may be small, dry and grayish in color. Placing too much emphasis on stool examination may thus be misleading. A plain upright roentgenogram of the abdomen with the finding of a dilated stomach and

duodenum (the "double-bubble" sign) is all that is necessary to confirm the diagnosis (Figure 3).

Since the incidence of multiple atresia of the intestine is high (15 per cent) the entire bowel must be explored before doing a duodenojejunostomy, the procedure of choice for duodenal atresia, stenosis, or annular pancreas.[2] There are practical reasons for differentiating these entities from the less common duodenal obstruction secondary to malrotation of the colon with midgut volvulus. In neglected cases of the former, i.e., severely dehydrated or debilitated from lack of caloric intake, etc., partial decompression by nasogastric intubation can be achieved while optimal condition is obtained using hyperalimentation if necessary. Conversely, delay in operation in cases of midgut volvulus may rapidly lead to gangrene of the entire midgut. In cases of duodenal obstruction from malrotation of the colon and midgut volvulus, the bile-stained vomitus is usually later in onset with about 50 per cent of the infants having symptoms beginning in the first week of life. Generalized abdominal distention is present in one-half of the patients, denoting incomplete or partial duodenal obstruction. In these, plain x-rays of the abdomen reveal a less prominent "double-bubble" sign with evidence of gas in the distal small and large bowel. Administration of contrast agent via an enema will usually confirm the diagnosis by denoting the abnormal location of the cecum (Figure 4). Early operation is important as rapid deterioration of the infant usually denotes compromise of the intestinal blood supply.

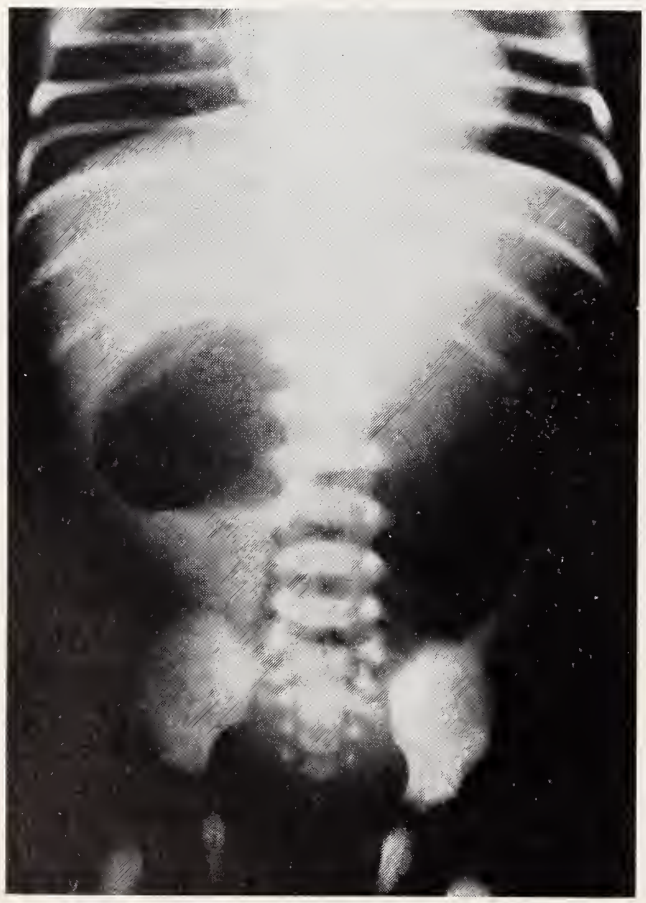


FIGURE 3

Upright roentgenogram of abdomen showing "double-bubble" sign of duodenal obstruction.

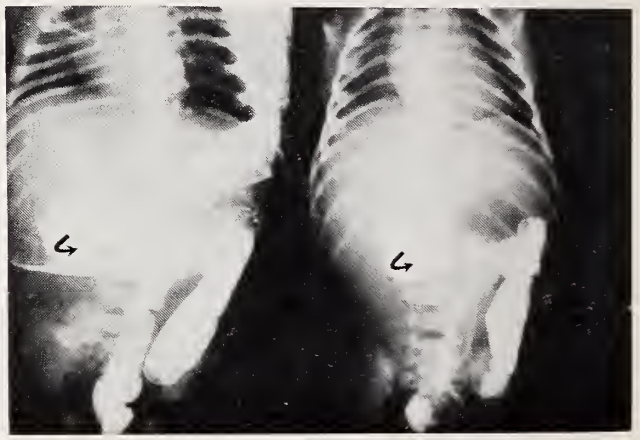


FIGURE 4

Barium enema findings in malrotation showing cecum (arrow) in upper abdomen. On right, dilated stomach bubble above contrast-filled colon suggesting accompanying duodenal obstruction.

Low Intestinal Obstruction

Newborns with jejunal or ileal atresia or stenosis show varying degrees of intestinal obstruction depending upon the level of the obstructive lesion and its completeness. Babies with atresia show green vomiting usually within 24 hours as the most consistent finding. Generalized abdominal distention is the rule with stools usually absent. Since obstruction of the more distal small bowel may be impossible to differentiate from large bowel obstruction on plain roentgenograms, the barium enema becomes of increasing importance. An unused colon of microsize confirms the presence of a proximal atresia or meconium ileus (Figure 5).

Although atresia, duplications, etc. occur in the colon, the more frequent cause of obstruction of the colon in the newborn is Hirschsprung's disease. This diagnosis must be considered in every instance of intestinal obstruction in the newborn. Failure to pass meconium, or alternating bouts of diarrhea associated with progressive abdominal distention and bile-stained vomitus warrant a barium enema examination. Finding a normal size colon rules out intestinal atresia. A narrowed segment at the rectosigmoid may or may not be present. Infants with Hirschsprung's disease retain the barium for prolonged periods making follow-up roentgenograms at 24 hours a valuable aid in confirming the diagnosis. Delay in

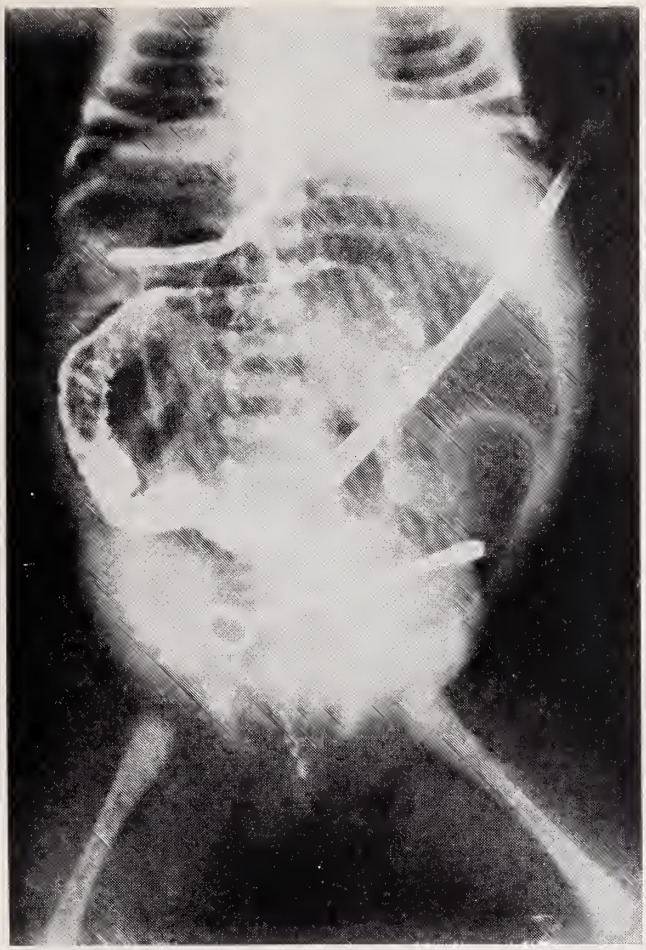


FIGURE 5

Barium enema showing an unused colon of microsize and marked distention of small bowel, indicators of low small bowel obstruction.

relieving the obstruction with a colostomy may lead to necrotizing enterocolitis, peritonitis and death.

Abdominal Wall Defects

Inguinal hernia is mentioned here because it is the most common cause of intestinal obstruction in infants from the end of the first week of life to the age of four months. Manipulative reduction of an incarcerated inguinal hernia should be attempted with gentle digital pressure after sedating the child with Meperidine, 1 mg./1 kg. given intramuscularly, and applying an ice bag to the affected side. Elective repair can then be done after 36 to 48 hours. If the reduction is unsuccessful or if the infant has continuous crying, vomiting, abdominal distention, or bloody stools, emergency herniotomy is indicated.

Gastroschisis: Gastroschisis should be recognized as an entity distinctly different from omphalocele. It is a congenital defect of the abdominal wall leading to various degrees of evisceration. The umbilical cord has a normal insertion and there is no sac covering the herniated abdominal contents. This is a true surgical emergency requiring early operation for survival. It is seldom possible to close these defects in one stage due to the inability of the peritoneal cavity to receive the large amount of edematous bowel encased in fibrinous exudate. Recent developments of a satisfactory prosthetic material (silon) to act as a cover to the eviscerated bowel has allowed successful staged closure.[1] This approach eliminates the complications of pulmonary insufficiency and cardiac failure previously due to elevation of the diaphragms and vena cava compression associated with attempts at primary closure. Prematurity, sepsis, gangrenous small bowel requiring resection, and shortened bowel associated with this condition account for the current mortality rates ranging from 15 per cent to 50 per cent.

Omphalocele: The small omphalocele appearing as a convex disc of amniotic membrane above the abdominal wall at the site of the umbilical cord usually offers no difficulty in primary repair. Most often however, one is faced with a large defect covered with amnion and containing most of the abdominal viscera. The undeveloped peritoneal cavity cannot accommodate these organs. In addition, malrotation is usually present. If the omphalocele sac is ruptured, a clinical situation similar to that of gastroschisis exists.

When the infant is first seen, the sac or eviscerated bowel should be covered with moist sterile sponges and the abdomen wrapped loosely to prevent pressure on the herniated mass. Nasogastric intubation and suction is instituted to prevent increasing gaseous distention of the bowel. Again staged repair using a silon prosthesis allows one to gradually increase the capacity of the peritoneal cavity and obtain primary closure of the abdominal wall defect within a period of two weeks. Since prolonged ileus during this time is the rule, oral alimentation is usually precluded and adequate caloric intake is obtained with parenteral hyperalimentation via a catheter placed in the superior vena cava. Successful outcome in management of these huge defects today depends upon our ability to prevent sepsis.

Medical College of Georgia 30902

REFERENCES

1. Allen, R. G. and Wrenn, E. L.: Silon as a sac in the treatment of omphalocele and gastroschisis; *J. Pediat. Surg.* 4:3-8, 1969.

2. Fonkalsrud, E. W., DeLorimier, A. A. and Hays, D. M.: Congenital atresia and stenosis of duodenum: a review compiled from the members of the Surgical Section of the American Academy of Pediatrics; *Pediatrics* 43:79-83, 1969.

3. Holder, T. M. and Ashcraft, K. W.: Esophageal atresia and tracheoesophageal fistula; *Ann. Thoracic Surg.* 9:445-467, 1970.

4. Lloyd, J. R.: The etiology of G.I. perforations in the newborn; *J. Pediat. Surg.* 4:77-84, 1969.

5. Parrish, R. A., Sherman, R. T. and Wilson, Harwell: Spontaneous rupture of the G.I. tract in the newborn; *Ann. Surg.* 159:244-251, 1964.

A Deep Ulcer and Stricture of the Esophagus

WILLIAM WHITAKER, M.D. *and* AL MORLANG, M.D., *Atlanta**

DR. WILLIAM WHITAKER: The patient to be presented is a 63-year-old male who gives a history of dysphagia for a period of 12 years. This is a representative film of barium swallow done three years ago. Dr. Morlang, what do you think of this radiograph? (Figure 1)

Dr. Al Morlang: This film demonstrates a constricting lesion involving the lower esophagus which is atypical for neoplasm. The mucosa appears intact in the region of the constrictive segment. The spot film demonstrates evidence of an ulcer in the region of the lesion, and possibly a second ulceration which is smaller in size. The shelving margin at the proximal extent of the lesion certainly would suggest the possibility of carcinoma. The duration of symptoms would be against this possibility.

The fundus of the stomach appears to be collapsed and non-distensible on these films. This suggests the possibility of infiltrating carcinoma in the fundus of the stomach which is invading the lower esophagus. Again, this would be unlikely in view of the duration of these symptoms.

The projections in the region of the narrowed segment appear to represent actual ulcerations rather than diverticula. They have the appearance of peptic ulcerations in the stomach, the ulcerations are deep. The presence of deeper ulcerations, such as shown here, suggests the possibility of Barrett's esophagus and ulcerations. Barrett's esophagus has been described as ectopic gastric mucosa in the lower esophagus with ulcerations which occur at the junctional epithelium between normal esophageal mucosa and the gastric mucosa when gastroesophageal reflux occurs. These represent true peptic ulcerations.

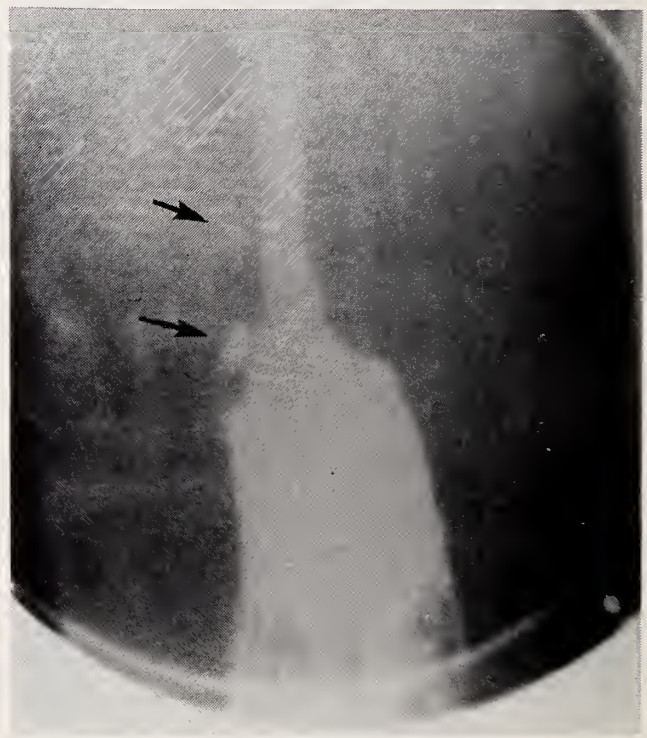


FIGURE 1

Spot film of lower esophagus demonstrating constricting lesion. The arrows indicate a large penetrating ulcer and a second smaller crater.

Dr. Whitaker: The patient had a recent barium swallow examination three years after the examination you just discussed (Figures 2 and 3).

Dr. Morlang: There has been progressive shortening of the stenotic segment in the lower esophagus, this would be secondary to scarring and stricture formation with longitudinal contracture of the wall

* *From a weekly x-ray conference, Department of Radiology, Emory University School of Medicine, Atlanta, Georgia 30322. The conference material was edited by Drs. J. L. Clements, Jr. and H. S. Weens.*

of the esophagus. This also indicates an inflammatory process. There appears to be a small segment just below the esophagus which may represent a hiatal hernia, which is stretched and distorted by the longitudinal shortening of the scarred esophagus.

Dr. Whitaker: Wouldn't reflux esophagitis without ectopic gastric mucosa ulcerate?

Dr. Morlang: The ulcerations with reflux esophagitis are quite superficial and most often are not large enough to be recognized radiographically. The deep penetrating ulcers, which as we see here, are usually junctional in nature.

Dr. Whitaker: The patient underwent open thoracotomy and the strictured segment of the esophagus was removed and an esophagogastrostomy was performed. Dr. Palmer, will you discuss the pathology?

Dr. Capers Palmer: The gross specimen demonstrates evidence of a deep penetrating ulcer in the region of the stenosed lower esophagus. There is a tremendous amount of inflammation in the wall of the esophagus at this level with marked thickening of the wall. This is similar to what we see in the duodenum with chronic peptic ulcer disease with scarring and thickening of the wall.

Histologically, the region of the ulceration shows complete destruction of the mucosa so that we cannot identify the character of the epithelial lining at the level of the ulceration, however in another area near the ulceration, mucus secreting glands are present indicating that this would go along with Barrett's ulcer. The proximal site of resection demonstrates the presence of gastric mucosa with parietal cells. This should be considered congenitally ectopic gastric mucosa since glandular tissue is present. This would be similar to the ectopic gastric mucosa that occurs in the Meckel's diverticulum.

Comment

Chronic esophagitis is a fairly frequent complication of direct sliding type hiatal hernia with gastroesophageal reflux. Esophagitis of this type is infrequently diagnosed by radiographic examination since ulcerations, if they occur, are very superficial in nature. An unusual variation in the esophagus is the presence of ectopic or heterotopic gastric mucosa in the lower esophagus (Barrett's esophagus). When

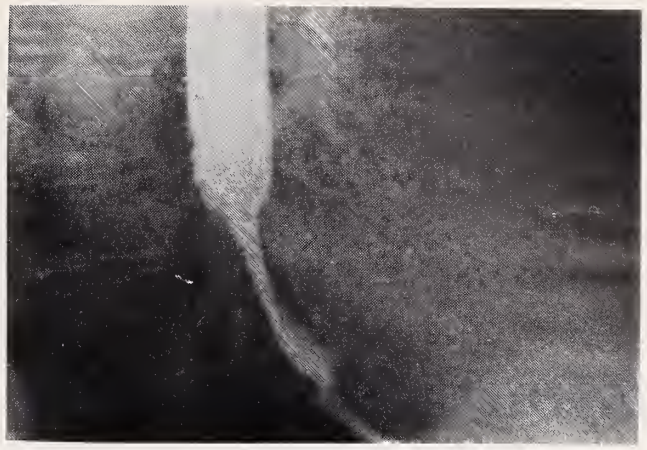


FIGURE 2

Initial film showing stricture in the distal esophagus. The ulcer craters are not demonstrated on this view.

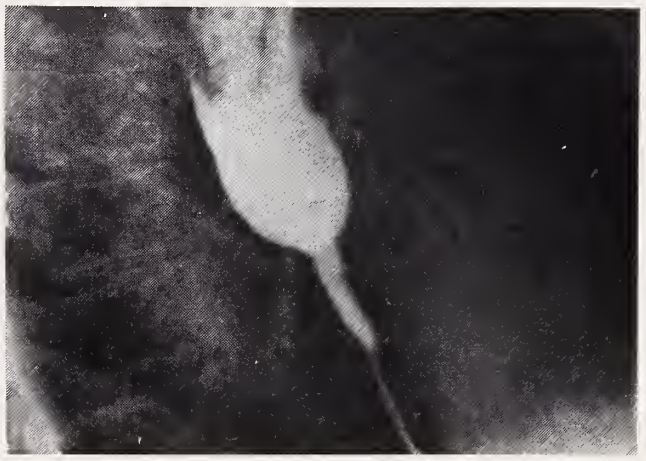


FIGURE 3

Follow-up after three years showing progressive stricture formation with shortening of the strictured segment. A stretched distorted herniated stomach is demonstrated below the stricture on both examinations.

gastroesophageal reflux occurs in this instance, this abnormal mucosa has a tendency to develop the peptic-type of ulcerations which are the deep penetrating type seen in the stomach and duodenum. The patient may have ectopic or heterotopic mucosa in the lower esophagus without signs or symptoms unless hiatal hernia develops with gastroesophageal reflux.

REFERENCES

1. Wolf, Bernard S., Marshak, R. H. and Som, M. L.: Peptic esophagitis and peptic ulceration of the esophagus; *Amer. J. Roentgen.* 79:741-759, May, 1958.

Only 16 similar cases have been reported previously

Retroperitoneal Abscess From Posterior Perforation of Duodenal Ulcer

H. T. EDMONDSON, M.D. *and* DANIEL B. TERRY, JR., M.D.,* *Augusta*

THE INFLAMMATORY REACTION from duodenal ulcers which perforate posteriorly usually is localized to the ulcer bed. Local defenses normally seal off the area and prevent diffuse spread of intraluminal contents and abscess formation. The recent occurrence at this hospital of a massive and diffuse retroperitoneal infection from a perforated posterior duodenal ulcer prompted this report. This event is apparently very rare as only 16 similar cases of duodenal and one of gastric ulcer perforation have been reported in the medical literature. A search of our records failed to recall a similar incident at this hospital. Early diagnosis is imperative as delayed surgical intervention is invariably fatal.

Report of a Case

A 54-year-old male was admitted to the Veterans Administration Hospital in January, 1972, with a three-day history of severe abdominal pain and intermittent vomiting. The onset of the pain was relatively sudden, and it was localized in the epigastrium. It eventually radiated down into the right abdomen and became most severe in the right lower quadrant. Past history revealed surgical closure of an anteriorly perforated duodenal ulcer five years previously. The patient described ulcer symptoms on occasion in the interim, and in 1968 had an x-ray documented posterior duodenal ulcer. He was advised to have surgical treatment of the ulcer at that time, but refused the operation. A follow-up upper gastrointestinal x-ray study in 1970 did not reveal an ulcer.

Physical examination was that of febrile (103°), dehydrated patient with a silent, but essentially nontender abdomen. White blood count was 9000 with 90 percent polys; HBG 16.8; HCT 48 percent. Urinalysis was negative. X-rays of the abdomen (Figure 1) were consistent with an ileus. The right abdomen showed a generalized density, which at the time was not thought to be an abscess. Clinical tests for psoas irritation were unremarkable. Peritoneal paracentesis did not produce free intraperitoneal fluid. Supportive therapy was begun, and continued for 24 hours. The patient was then taken to the operating room with a tentative diagnosis of a localized inflammatory mass resulting from either a perforated duodenal ulcer or a perforated appendix. Absence of abdominal wall tenderness was noted but not explained.

Surgical exploration revealed a massive retroperi-

FIGURE 1

Abdominal film showing density in patient's right abdomen, thought at the time probably to represent an intraperitoneal inflammation.

* *From the Dept. of Surgery, Medical College of Georgia, and the Surgical Service of the VA Hospital, Augusta, Georgia.*

toneal abscess, centered in the retroduodenal area with extension into the lesser sac and down the right retrocolic space. The origin of this abscess was found to be a posterior duodenal ulcer which had perforated and spread into the retroperitoneal space. The duodenum was so destroyed and fragmented by the abscess or inflammatory reaction that it had to be divided, closing its stump with duodenostomy tube drainage. The stomach was closed distally and a low posterior gastrojejunostomy performed. Multiple penrose drains were left to extend through the skin of the right flank. The postoperative course was complicated by pneumonia, pancreatitis, sepsis, and breakdown of the duodenal stump. He expired on the tenth postoperative day, having failed to overcome the general deterioration from these multiple complications. Postmortem examination confirmed the operative findings and diagnosis and showed an intact gastroenterostomy and distal gastric suture line.

Incidence

Hashmonai, *et al.*,[1] in March, 1971, reviewed the world literature and reported four cases, making a total of 13 proven instances up to that time. Since then, Wulsin,[2] in March, 1972, reported four additional proven cases, which with this current report, brings the number of cases reported to date to 18.

Diagnosis

Of these 17 cases reported in the literature, approximately one-half had had ulcer symptoms prior to the perforation. Severe epigastric pain, often radiating into the right lower abdomen, and associated vomiting were the usual initial symptoms. Fever, leukocytosis, and decreased peristalsis were common. Abdominal tenderness and rigidity, the usual signs of intraperitoneal perforation, were often minimal.

The pre-existing ulcer had been diagnosed by x-ray in approximately one-half of the cases. In one case, which was the only gastric ulcer, mediastinal air was seen on x-ray. In our case, we were aware of a previous duodenal ulcer that had perforated anteriorly, and assumed the possibility of a repeat anterior perforation. The plain x-ray film of the abdomen strongly suggested an abscess in the right upper quadrant but we were unable to extract purulent fluid by peritoneal tap. The correct diagnosis in our case was not established prior to laparotomy. Two previously reported cases were correctly diagnosed prior to operation by the presence of retroperitoneal air. Twelve were diagnosed at autopsy. Twelve were explored surgically and noted to have a retroperitoneal abscess, recognized at the time as being due to posterior perforation of a peptic ulcer in only three instances.

All but five of the 17 cases previously reported died of complications resulting from their perforation. This high mortality in part can be attributed to delay in operation because of the difficulty in establishing an early diagnosis, but the mortality was also high in those instances when exploration was reasonably early and the retroperitoneal space adequately drained. Hashmonai suggests that drainage alone is probably insufficient as, unlike other retroperitoneal abscesses, those due to duodenal perforation have access to duodenal contents with enzymatic activity.

The question arises: What additional measures are indicated? In our case it was not feasible to close or patch the hole from a posterior approach. Therefore, in addition to retroperitoneal drainage, the duodenum was closed over tube drainage, the distal stomach closed, and a low posterior gastrojejunostomy performed. It was anticipated that at a later date resection of the gastric antrum and vagotomy would be performed. Unfortunately, the patient did not survive, probably because of the relatively far advanced state before operative intervention. In view of the high mortality associated with retroperitoneal drainage alone, it would seem necessary to divert the gastric outflow away from the perforation. If the patient's condition permits a gastric resection with Bilroth II anastomosis should be considered.

Summary

A case of massive retroperitoneal infection from posterior perforation of duodenal ulcer has been presented. The patient did not survive, probably because of a delay in surgical exploration. This event is rare as only 17 other cases have been reported. In approximately one-half of these cases duodenal ulcer disease had been established by x-ray or strongly considered clinically. However, posterior perforation was not often appreciated as the etiology of retroperitoneal abscess when discovered at surgical exploration. It is important that the surgeon be aware of posterior duodenal ulcer perforation as a possible cause of this event. Early operative intervention is mandatory.

Retroperitoneal drainage alone is apparently not sufficient and is associated with a very high mortality. It is felt that, although unsuccessful in this instance, diversion of the gastric outflow should be established by some means in addition to adequate drainage.

VA Hospital 30904

REFERENCES

1. Hashmonai, M., Abrahamson, M. B., Erlik, D. and Schramek, A.: Retroperitoneal perforation of duodenal ulcers with abscess formation: report of four cases and survey of the literature; *Annals of Surgery* 173:409, 1971.
2. Wulson, John J.: Peptic ulcer of the posterior wall of the stomach and duodenum with retroperitoneal leak; *Surgery, Gynecology & Obstetrics* 134:425, 1972.

As the world moves toward urbanization and industrialization, additional psychologists, social workers and nurses will be needed to assist the work of the psychiatrist.

Mental Health Services in a Changing World

ADDISON M. DUVAL, M.D.,* *Atlanta*

PRESIDENT BUNTING, members of the faculty and student body, distinguished guests, ladies and gentlemen:

It is a distinct honor and a great pleasure for me to appear before you today as the recipient of your college's Distinguished Service Award. I consider this award as the capstone of my 40 years of public service in the mental health field. I am deeply grateful, and would like to share with you a few thoughts gleaned from those years.

From many directions and from many individuals in our country comes the insistent voice of opinion that we are living in an era of the greatest changes ever faced by modern man.

Dr. Philip R. Lee (former assistant secretary, Dept. of Health, Education and Welfare) put it this way when he said,

"But today I think we can say with certainty that never before have worldwide currents of change converged so swiftly upon a single generation. Never before has the need to deal with events constructively demanded so much in the way of flexibility, innovation, and foresight."

In my discussion with you today, I will try to identify some of these changes and the influences which they have on mental health programs in this country.

Second, I will try to point out man's need for successful adaptation to himself and to his environment in his search for stability and meaning in life.

Changes Faced by Modern Man

There are many changes going on in our world today. Some of these can be readily identified while others cannot. Probably for the first time in history, we can see a realistic chance to develop a world without hunger, poverty, ignorance, or disabling disease. This possibility is primarily due to an enormous increase in knowledge related to nutrition, family planning, control of infections, environmental hygiene and human behavior. So many changes are taking place that someone has said—if the human race is to survive, it will have to change its ways of thinking more in the next 20 years than in the last 2,000 years. But surely, these new changes—though demanding, and at times even frightening, are within the capacity of successful adjustment. However, I think we should feel a sense of urgency about solutions when we remember that the United States and Russia together have enough fissionable material to eliminate at least one-eighth of all life on this earth!

What are some of the more important changes in our present national way of life which we should be aware? I will list only 10 of these changes, all of which are sociological in nature. You could, I'm sure, supply your own list of changes. Mine has these:

1. Population explosion.
2. Increased urbanization.
3. Advance of industrialization.
4. Increase in mobility of population.
5. Increase in standard of living.
6. Increase in population and span of life.
7. More leisure time.
8. Changing family life.
9. Increased scientific knowledge of man.
10. Changing roles of most professional personnel.

Let us take a look at some of the results of these changes, all of them current and living—by no means complete. They have involved me, and most

* *Director, Division of Mental Health, Georgia Department of Public Health. Speech was presented at Georgia College at Milledgeville, May 3, 1972, in response to acceptance of a Distinguished Service Award from the college.*

certainly involve you—personally and professionally.

Our population explosion is a most important problem. One hundred forty million in 1945, 185 million in 1965, 250 million by 1980 and 400 million by 2010. But look also at the change in age groups. In 1945, there were 75 people under 20 years old and over 65 for every 100 between 20 and 65. In 1969, this ratio rose to 85 and by 1980 it is predicted to go above 100. At that time then the ratio of largely dependent, non-producing individuals will equal or surpass in number the middle age or producing group. What impact will this have on our economy and other practical aspects of living? For instance, must we plan to defer retirement from 65 to 70 or even 75? Or will technological advances permit more production with less people employed?

By 1975, about 80 per cent of the people in the United States will live in towns and cities. By the year 2000, it is predicted that 90 per cent of the people of the world will live in cities of 20,000 and up and 50 per cent will live in cities of 100,000 and up.

At present, 70 per cent of the people of the U.S.A. live on two per cent of its land area. The density of population varies widely in our larger cities. For instance, Philadelphia has about 1,225 persons per square mile while Detroit has 1,915, Atlanta 800, Cleveland 2,610 and New York has 14,-759 per square mile. This concentration of human beings in our cities produces all sorts of troublesome and expensive demands for the services these people need. Water, clean air, electricity, housing, garbage and sewage disposal, schools, recreation and health to name a few. The solution of these problems of living is considered by some to be the challenge of the century. Billions of dollars will be spent in the next few years attempting to solve these problems but the prospect remains that more and more people will move in to further increase the population density of our cities.

Now, let's look at the changes taking place in occupations at present. The one-family farm is almost extinct. Less than 10 per cent of our people now work on farms, but we use more farm acreage than ever before. Industry employs 26 per cent. Most of us follow the habit of not making for ourselves anything we can get others to make for us. In so doing, some of us are doing more mental work and less physical work and getting fat in the process. And our leisure time is going to multiply two or three fold!

What will we do with that much leisure time? Television? Slowly sinking into the non-productive swamp of spectator sports?

Out of all these changes there is developing an understanding that we simply cannot as a nation go it alone in this new and different world. As my friend, Professor J. W. Fanning, former executive vice-president of the University of Georgia says, "Never has man been more dependent upon man than today—yet never have men been in greater conflict than today. Our communities are a mass of interdependencies."

A noted psychiatrist and neurologist said 30 years ago that "The greatest trouble with the world today is the perversity and contrariety of human behavior."

These words might better have been spoken today, as we hear this idea expressed in many different ways.

"These strange young people with long hair and beards," "Mini-skirts are about to bottom out on us," "I can't understand the uninhibited sex of teenagers," "What is this trip the college students keep talking about?," "What has happened to the old-fashioned standards of personal behavior?," "The generation gap is something I don't understand," "What has become of the old-fashioned religious home?" My young friends, who is to supply the answers to questions of this sort that drive a wedge between generations?

The Need for Adaptation

Let us now turn our attention to the subject of human growth and adaptation. Let us see whether there is any way that we can view the human animal in a simple and understandable way so that we can have a clearer understanding of the stereotype that we call a normal human being.

Modern science tells us that man is an integrated biological, psychological, sociological and spiritual organism. This view permits us to consider:

1. Man's physical health and illness.
2. Man's emotional health and illness.
3. Man's social health and illness.
4. Man's spiritual health and illness.

Our conception of man is broadened and also clarified by looking at him from these different points of view.

But even before we view individual man in this broad-spectrum manner, we should consider what comes to him by way of heredity. The greater part of the potential destiny of an individual person is decided by the time of birth. At that time the inborn potential for growth and maturation is already established. Major developmental decisions have been made concerning the size of the brain, the normality or abnormality of physical conformation and function such as congenital heart disease, mental retardation, a paralyzed limb, cleft-palate or blood cancer.

In view of this "Birth Potential" regarding health or disease, about all that modern medicine can recommend is for the newborn to have the best living conditions possible so that the greatest growth

toward good health can take place within the limits of the birth potential. For the child develops in accordance with what is provided him that is either advantageous or detrimental to his natural growth and development. Thus the kind of early life experience of the child is very important. Good nutrition, a happy home, supportive love and affection, attention to childhood infections and an encouraging and stimulating environment, all tend to promote good health and good hygiene. The opposite is just as true. Thus the kind and type of childhood may well mean the difference between a normal and an abnormal adult. These early childhood years are vital and we cannot stress this fact too much.

In trying further to understand a human being, it sometimes helps to think about (1) the basic intelligence of the person—low, average, superior; (2) the emotional aspects of the person—stable, unstable, adequate or inadequate; and (3) the inborn biological instincts or urges that make all men similar but different.

In these several approaches to the understanding of human beings, we should remember that all human behavior is goal-directed and, therefore, capable of understanding. But scientific understanding cannot come unless we know what type person we are dealing with, his early life experiences and determinants of growth and development and also what is his present life situation with reference to the satisfaction or dissatisfaction of his basic biological, psychological, social, and spiritual needs. How a particular person, with his inherited and acquired characteristics, is adjusting to his life-situation, including his environmental situation at that particular time, constitutes his state of health.

At this point we could speculate that all of life is a continuing conflict—whether this be mostly biological, psychological, social or spiritual or whether it be a conflict in two or more of these areas.

I have not said much so far about the psychological, social or spiritual aspects of man. For the sake of brevity, I must not spend much time with these in spite of their obvious importance. The psychological issues of life deal mostly with feeling, emotion, attitudes, affection, love, generosity, hate, exhilaration, depression, moodiness, cheerfulness, and the like. These aspects bring meaning and feeling tones to the everyday happenings of life.

Man is also a social animal, and as such he normally likes to relate to other human beings. Interpersonal contacts and communications are enjoyed. He likes competition with his social equals. He tends to develop within a natural and fitting social class as a normal phenomenon. However, personal conflicts often develop as the process of acculturation goes forward. These conflicts are usually due to competition between the biological urges and the urges for acceptance by his social group. Fortunately for most of us, this problem was reasonably resolved before adulthood. All behavior must be considered in the light of sanctions and taboos in a particular culture. In considering the presence or absence of what we call mental illness, it is most important to understand the accepted mores and customs of the culture to which the individual belongs. If we do not, we can be led very far afield and make gross errors in mental diagnosis.

Personally, I believe man has an inborn need for a spiritual aspect of his being. He has a need for a belief in a stronger being or force outside of himself. He has a need for believing that he has a destiny beyond this temporal life on earth. His faith and belief in such Super Being can help sustain man when life's problems are about to overwhelm him. This spiritual aspect of man can be a great source of strength and personal satisfaction. As a result, life seems more valuable, more enjoyable and more meaningful.

Fortunately much the greater number of people in the nation remain relatively healthy at any one time, but even so the extent of mental disorder is so great that without doubt it is our number one health problem. Let's examine a few of the statistics:

Approximately 10 per cent of the people in the U.S.A. suffer from some type of mental illness—mild to severe. All age groups are affected from the very young to the very old.

More than 500,000 people are in mental institutions at any one time.

More people are admitted to mental hospitals in a year than are committed to prisons for commission of crime for the same period.

Some 20,000 persons commit suicide each year and countless others make an attempt without attracting public attention—or the suicide disguised as natural or accidental death. In the U.S.A., the cost of mental hospitalization alone runs to more than three billion dollars a year! The cost of new construction for mental hospitals has passed the four billion mark for the past 10 years. The amount of lost earning power of the mentally ill over that same 10-year period would add additional billions to the total cost.

But even with all this money being spent, we are still not doing a really adequate job of treating and rehabilitating the mentally ill.

A recent report from the National Institute of Mental Health indicates that two per cent of the children in this country under age 18 need treatment for

emotional disorders. This two per cent amounts to 1,400,000 children as there are 70 million children. Only 473,000 children receive treatment in any one year, leaving nearly one million children untreated.

With the increase in birth rate, by 1975 one and a half million children will need treatment for emotional illness.

In addition to these facts about mental illness, there are all sorts of hidden or partially hidden aspects of the problem. These are juvenile delinquency, divorce, school drop-outs, drug abuse, alcoholism, absenteeism, accident proneness, the hidden suicidal attempts, and others. And don't forget that crime costs the nation 20 billion dollars a year.

The Future

In order to meet the needs of our citizens for mental health services it seems obvious that public service programs—government programs—must be the principal modality for delivery of service, supported secondarily by private practice. We must turn away from the medical disease model toward a developing social model which will permit of helping assistance being given by others than the psychiatrist. We see an increasing need for more psychologists, social workers and nurses. With special training we can use bachelor degree and associate degree students who will serve as generic mental health workers with the mentally ill, the mentally retarded, the alcoholic and drug abuser. The basic ingredient for these workers will be a liking for people and an innermotivation to help others who are less fortunate—the poor, the sick, the troubled, the less endowed, the addicted or the deprived. But their idealism must be made of firm stuff. These are demanding times, and an aimless desire to do good will not long suffice.

In these fields it seems to me that the student's search for identity and for meaning in life can be consummated. Here may be found purposeful dedication to one's life work. This is a basic visceral reaction. It pervades one's whole being. This develops into a personal ministry, a personal commitment, a raison d'etre.

In closing, I thank you for your attention and interest and commend to you my favorite quotation from Marcus Aurelius—

"I expect to pass through this world but once; therefore, if there be any kindness I can show or any good thing I can do for any fellow being, let me do it now; let me not defer it or neglect it, for I shall not pass this way again."

47 Trinity Avenue, S.W. 30334

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF COUNCIL

September 23, 1972

Headquarters Office Report: Received report on continued search for legislative/public relations staff member. Received notification of JMAG managing editor's resignation.

Magnet Conference: Reviewed plans for Conference scheduled at Stouffer's Inn, Atlanta, November 11-12 with emphasis on legislation-chiropractic.

Appointments: MAG Committee on Communications, Subcommittee on Liaison with County Societies—Robert P. Wight, M.D., Tifton; Kidney Disease Advisory Committee, Department of Human Resources—Arthur L. Humphries, M.D., DeKalb, Elbert Kuttle, M.D., Atlanta, Garland D. Perdue, M.D., Atlanta, William C. Waters, M.D., Atlanta, Joseph S. Wilson, M.D., Atlanta, LaMonte E. Danzig, Savannah.

Medical Advisory Board: Referred to Legislative Committee for MAG support in 1973 General Assembly of Bill to create Medical Advisory Board to Director of Department of Public Safety.

HMO Legislation: Referred report from joint Legislative and Private Practice Committees on HMO legislation for additional study to Committee on Legislation.

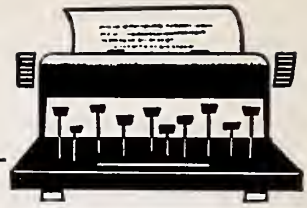
MAG-GSNA Joint Practice Committee: Received report from Chairman of MAG Subcommittee on Nursing regarding its activities and delineating the role of the nurse in the delivery of health care and her relationship to the physician's assistant.

Computer Billing Service for Physicians: Received report from legal counsel indicating that any profit from the provision of such service would be taxed on the basis of unrelated income to the Georgia Medical Care Foundation.

Acupuncture: MAG legal counsel reported that in his opinion acupuncture in Georgia is the practice of medicine.

Socio-Economic Seminars for Medical Students, Residents and Interns: Approved sending MAG representative to attend similar AMA workshop in Chicago, Illinois. MAG seminar scheduled February 4, 1973 in Atlanta and February 17, 1973 in Augusta.

EDITORIAL



The American Medical Association: What Is It? What's Wrong With It?

In June, 1972, in testimony before the Council on Long Range Planning and Development of the American Medical Association, I stated that "The primary strength of the American Medical Association is now, and has been, the result of it being a federation of constituent associations." That is the answer to the first question, but what does that mean? Simply, that the show begins with you and I and our local medical society, then grows to our district medical societies, then to the Medical Association of Georgia, functioning in concert with the 50 other states and territorial associations which make up the AMA. The most important link in this chain is, by all odds, you and I, and the local medical society.

The American Medical Association is not some giant ruling octopus based in Chicago that dictates the behavior and practice of every American Doctor of Medicine. The above statement is true simply because you and I, whether we actively participate or not, elect the members of the Medical Association of Georgia delegation to the House of Delegates of the AMA. These members, acting with the delegates of the other constituent associations, make up the House of Delegates of the AMA. This is the governing body, the policy making organization. So you and I, at the level of the local medical society, participating actively or by default, set the policies of the AMA.

This brings us to the discussion of the second question, the symptoms of the disease, if you please. This is not a new subject; in fact, it has been going on since the AMA was founded. The discussion has been intensified in the past few years, especially with the introduction of so-called "Third Party Medicine." Additional fuel has been added since "government" became one of the participants in Third Party Medicine.

One of the first symptoms we discover is that all Doctors of Medicine in the United States are not members of AMA. It is true at the present time more than 200,000 physicians belong, but it is also true that approximately 100,000 physicians do not belong to AMA. Some of these are retired, some are members of full time teaching staffs, but too many are physicians like you and I, who do not know the advantages of belonging, and this includes many of the younger physicians, just out of training, who have had too little exposure to organized medicine in general. How much have you and I done recently to recruit any of these people to membership? Perhaps the worst single symptom involved in the whole discussion is "apathy." This applies to your and my apathy, as well as those who are not members of AMA. If you are not an active member of your local society up through MAG, then you are certainly a poor recruiter and example for those who are not active, as well as those who are not members.

The next major problem area we find in the analysis of symptoms is that of communications. Let us admit now that this subject is a two way street. Those in positions of leadership in AMA and MAG, including the professional staff, are making a tremendous effort to improve every known technique to better inform

membership of the many problems that we as a profession face and what is being done to solve them, where our strengths are and where our weaknesses can be found and corrected, but before you and I can be informed we have to be reached at the end of the communication pipe line. That simply means that more than 35 percent of us (you and I) must actively attend our local society meetings, more than 30 percent must attend district meetings, and more than 20 percent must attend the state meeting, and, above all, more than 30 percent of us must respond to our first class mail. How about starting a chain reaction in your local society just to read this issue of your *Journal of the Medical Association of Georgia.*

I am sure there are many questions that come up which could easily be answered, if there were an opportunity. Write your MAG delegation and ask us. Even a post card will do. If you don't know who we are and our addresses, write AMA Delegates at the MAG Headquarters (938 Peachtree Street, N.E., Atlanta, Georgia 30309) and we will receive the mail. I personally guarantee you a reply. If you would like a person-to-person questions discussion of these topics relating to AMA, let us know and let your county society officers know, and your delegation will do its best to arrange such a discussion as early as is practical.

Finally, may I take the privilege of making a personal observation that covers 25 years of activity with organized medicine from the local society up. If you, as a physician, will participate in local society activities regularly, you will become so involved you will inevitably become informed and interested for yourself, as well as your profession.

The most important thing of all for us to remember is that the physicians of this nation are not creatures of the American Medical Association. The organization goes from the grass roots up, from the local society to Chicago. The AMA is now, as it has been for nearly 125 years, a creature of physicians. They created it. They can change it. They can, if they wish, destroy it, but if they want their profession to be strong for their own benefit and for the benefit of the public, only they can make it so. Only physicians can give the AMA the strength it needs to continue its important programs and to develop new ones to meet new needs.

J. W. Chambers, M.D.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF COUNCIL

October 15, 1972

Interspecialty Council: Received report on proposed composition, activities and responsibilities of the Interspecialty Council that included representation in the House of Delegates and on MAG Council. Instructed Long Range Planning Committee to meet with Executive Committee of Interspecialty Council to study the Council's proposal.

Osteopaths: Voted to oppose any change in the interpretation of the Medical Practice Act regarding licensure of osteopaths by reciprocity for pre-1963 graduates.

Dissatisfaction: Discussed MAG and AMA member dissatisfaction and methods to better communicate with members.

Appointment: Announced appointment of Kathy Morse as JMAG managing editor.

Headquarters Building: Agreed to pursue investigation of new site for MAG Headquarters Building.

AMA Appointments: Recommended to AMA that its Councils and Committee appointments be based only on state medical association recommended nominees.

Foundation: Approved Foundation's serving as fiscal agent for health access stations where requested by local medical societies.

Executive Secretary: Received report from Foundation on hiring of executive secretary, Mr. Gustav Anderson, effective November 1, 1972.

Access Stations: Discussed proposal for state network of Health Access Stations to be financed through state and GRMP funds.

EXPANSION OF CARDIAC MONITORING USING RADIO-TELEMETRY

CHARLES B. UPSHAW, JR., M.D., *Atlanta**

It is only in the last 10 years that satisfactory electrocardiographic equipment has enabled doctors to monitor their patient's cardiac rhythm continuously. This improved technology allowed the opening of the first coronary care unit in 1962, and the opening subsequently of similar units in almost every hospital in the country.

Continuous Observation

The word "monitor" (Latin, monere, to warn or to remind) means continuous observation of the patient's cardiac rhythm by using an oscilloscope or by using a direct writing ECG instrument. Before 1962, doctors despaired of ever recording continuously a patient's cardiac rhythm during exercise because of the problems of interference on the ECG by skeletal muscle potential, unsteady ECG baseline, and poor adherence of electrodes to the patient. New techniques have solved these problems and have allowed excellent continuous ECG tracings to be obtained, not only on patients resting quietly in bed, but even under the most diverse and extraordinary situations. It is astonishing to learn that cardiac rhythm has been monitored during free-fall parachuting; during the violent exercise of obstetrical labor and delivery; in pearl divers; and in ducks and various mammals during underwater diving. Even an insect's heart rhythm has been monitored.

The most common human monitoring today occurs in the setting of the hospital CCU. Trained personnel observe the ECG as displayed on the oscilloscope, and there is usually available the additional capacity of recording selected portions of the cardiac rhythm on a direct writing ECG. Cardiac monitoring as used in this manner has been a major factor in enabling the doctor to treat promptly and successfully life-threatening cardiac rhythm disturbances in patients suffering from acute coronary heart disease and thus to reduce significantly the mortality from this disease.

Limited CCU Beds

The CCU system is enormously expensive, however, and most hospitals are able to equip and staff only about one CCU bed for every 75 general hospital beds. Since the demand for these specially-equipped beds is so great, a patient admitted to the CCU with an acute myocardial infarction may be permitted to remain there only during the most dangerous phase of the myocardial infarction, that is for the first two or three days after the onset.

The monitoring equipment is then removed, and he is transferred to a general hospital bed. It is worrisome to doctors that their patients are thus suddenly left without continuous observation of their cardiac rhythm. It would be impossible to afford a cardiac monitor for every hospital bed. Even if this were possible, there

** Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.*

would not be sufficient trained personnel to observe the cardiac rhythm on so many oscilloscopes.

Radio-Telemetry System

In order to meet this need, the author and his colleagues at Piedmont Hospital in Atlanta, Georgia have devised and implemented a simple, relatively inexpensive system for cardiac monitoring utilizing radio-telemetry. In radio-telemetry, patch-type electrodes are placed on the patient's chest. Input signals from these electrodes are carried by thin wires to the radio-transmitter. This apparatus weighs about 10 ounces, is pocket-sized and battery operated. It is generally strapped on the patient's chest or worn in a pajama pocket. No other wires are attached to the patient, and he is free to walk around in his room or in the hospital hall.

The ECG obtained by the transmitter is broadcast on a frequency beam, the signal being transmitted by antennae located in the ceiling to a radio receiver located in the hospital CCU. The ECG signals thus received are channeled into an oscilloscope or direct writing ECG instrument for observation and study. In our system, antennae have been placed in ceilings of the hall throughout the hospital in such a way as to pick up radio-ECG signals from any portion of the hospital and to transmit them directly to our CCU. There, trained personnel are able to observe the cardiac rhythm of these patients just as they do for patients confined to the CCU itself. Thus we have the capacity to monitor the cardiac rhythm of any patient at every location throughout the hospital, and we have been able to cover all our hospital beds by merely adding six radio-telemetry units. This coverage includes not only all general hospital beds, but also emergency rooms, labor and delivery rooms, pediatric beds and nursery beds.

Availability

The Piedmont Hospital is a six-story general hospital and has approximately 300 beds. For monitoring purposes we have four CCU beds with regular wire attachments to the patient for monitoring. In addition, we have six radio-telemetry units (transmitter, receiver, oscilloscope) with four of the radio-receivers and oscilloscopes located in the CCU and two located in the emergency room.

This system has allowed continuous monitoring of the cardiac rhythm of patients who have been discharged from the CCU. Further, it allows monitoring of patients with diverse cardiovascular problems while they are at bedrest and while ambulating. There are multiple potential uses for this system. It is relatively inexpensive, covers the entire hospital, and provides permanent tracings that are mainly free of artifacts. To date, the number of telemetry units in use in our hospital has been sufficient to meet the demands for its daily use.

384 Peachtree Street, N.E. 30308

PRINCIPLES GOVERNING PHYSICIAN-ATTORNEY RELATIONS

RANDALL L. HUGHES, ***Atlanta****

PHYSICIANS FREQUENTLY have occasion to serve as witnesses at trials or depositions and to supply reports directly to attorneys, insurers, government agencies or adverse parties. While the extent of the burden imposed upon the physician by such testifying and reporting varies markedly with his specialty, all physicians are to some extent required to perform this forensic function.

In an effort to avoid disputes between physicians and attorneys and to "obtain better understanding, professional cooperation and harmonious approaches to matters of interest," the Medico-Legal Committees of the Medical Association of Georgia and the State Bar of Georgia have adopted a declaration of principles, referred to as "The Principles," intended to establish standards for governing physician-attorney relationships. In this space this month, an attempt will be made to familiarize you with "The Principles" jointly adopted by the medical and legal professions of this State and to give a brief practical guide for their application.

A physician usually fills one of two roles in litigation whether the forum for that litigation is a court of law, the State Board of Workmen's Compensation, or some other agency. He is, generally, either the treating physician who is involved in the litigation because the patient chose to seek treatment from him, or he is an evaluating physician who is retained by the claimant, an insurer, an adverse party or a government agency to evaluate a claimant's condition.

In litigation the treating physician becomes an almost indispensable witness since he will in most cases be the only physician to examine the patient during the most acute period of an injury or illness. The treating physician will usually have his first contact with litigation when an insurer or the attorney for the patient contacts him for a report of his treatment and the patient's present condition.

Physicians' Reports

No report should be furnished to anyone other than the patient personally without a written authorization signed by the patient or his legal representative if the patient is deceased, a minor, or under some other disability rendering him incompetent.

Reports to insurers are usually, at least in the initial stages of litigation, short simple forms in the nature of a proof of loss and "The Principles" provide that they are to be made available without charge. If these reports are detailed, requiring analysis and study of records, the physician is entitled to make a reasonable charge.

Reports to patients or their attorneys are usually more complex than the simple

* *Prepared at the request of The Medical Association of Georgia, Mr. Hughes is an associate in the firm of Powell, Goldstein, Frazer & Murphy, General Counsel to the Association.*

proof of loss type and the physician is entitled to make a reasonable charge. "The Principles," however, require him to give a prompt and thorough response which should be provided within five days, if possible, and within twenty days in all cases. The report should include history, findings, treatment, diagnosis and prognosis.

Charges for a physician's report are a part of the expense of litigation which must ultimately be borne by an attorney's client, but "The Principles" recognize that an attorney usually initiates such requests and is in a position to protect the physician. They provide that an attorney requesting a report should see that "adequate arrangements" for the payment of the charge have been made.

Not all reports rendered by physicians in the course of litigation concern treatment by the physician. The parties sometimes agree and the court sometimes directs that a physician other than the treating physician be selected to evaluate a party's condition. In either event, the evaluating physician should be requested, in writing, to perform the examination and a copy sent to the adverse party. The request should inform the physician of:

1. The purpose of the examination;
2. A history of the complaint (the treating physician's records are usually available and are the best source);
3. The name and address of those to receive the report; and
4. The person responsible for payment.

Reports are time consuming but in 90 percent or more of the cases, eventually save the physician the much more time consuming enterprise of a court or deposition appearance by providing the basis for compromise of the claim. It is, therefore, in the best interest of the patient and the physician to provide detailed, accurate reports.

Depositions and Trial Appearances

Few physicians enjoy a personal appearance at the trial of a case. Most attorneys in Georgia try to be understanding and will depose a physician so the deposition may be read at trial in lieu of a personal appearance. On occasion, however, an attorney will decide in the exercise of his professional judgment that a personal appearance is essential to his client's case.

The attorney requiring a personal appearance at trial is obligated to arrange the physician's appearance so as to accomplish a minimum disruption of his practice. However, the physician should be aware that the law of Georgia requires that each witness at a trial be placed under subpoena and the litigant has no grounds for a continuance if the witness fails to appear and is not under subpoena. If a physician is released from a subpoena and not required to remain at the trial until his turn to testify arrives, the party who places him under subpoena is in grave peril of losing his case if the physician fails to return when called. Therefore, physicians should understand the attorney's dilemma and try to respond promptly to a call to come to the courthouse to testify.

Usually attorneys will give five days notice of the date of trial and physicians will be released from subpoena to return to their offices. They will be given the attorney's best estimate of the time to appear. This estimate should be updated during the progress of the trial with two hours notice of the actual time they must testify.

When a deposition is taken for use in evidence in lieu of a personal appearance or as a precaution against the unavailability of the physician, it is usually taken in the physician's office. This is a matter of professional courtesy to physicians which is not extended in many states and is not required in Georgia.

The demanding schedule of both physicians and attorneys makes late appearances a frequent problem. "The Principles" specifically provide that no party or witness need wait longer than thirty minutes after the time set for beginning the deposition. If the defaulting party is an attorney, "The Principles" provide he should bear the cost of the witness and reporter fees. If the defaulting party is a physician,

the deposition shall be reset by subpoena for the county courthouse for the county in which the physician resides.

For both trial and deposition appearances there should be a preappearance conference between the attorney calling the physician as a witness and the witness. Such conferences are proper and frank discussions are encouraged.

As in the case of detailed reports, reasonable professional charges in the form of witness fees are appropriate when a physician testifies at trial or depositions. Contingent fees for the physician are, of course, improper and should not be requested by either the attorney or physician.

Conclusion

In all cases where physicians are needed to furnish information, whether by report, deposition, or testimony at trial the procedure can be expedited to the benefit of all concerned if the members of both professions are considerate of the professional problems and responsibilities of the other. In the event of disputes between members of the two professions, including disputes over charges, the Joint Medico-Legal Committee of the Medical Association of Georgia and the State Bar of Georgia is available for mediation or arbitration. Hopefully, such assistance will be infrequently required, but the Committee does provide a reasonable means of solution when disputes do occur.

Eleventh Floor
C & S National Bank Building

HIGHLIGHTS OF COUNCIL

September 23, 1972

Financial Items:

1. Received Ernst and Ernst, MAG FY 1972 audit.
2. Approved $500 for socio-economic seminars to be held in February.
3. Authorized expenditure of $1,445.24 in payment to Alston, Miller & Gaines for preparation of amicus brief in podiatry litigation.
4. Authorized Executive Committee to transfer funds as needed to MAG Benevolent Foundation and ordered this item to be budgeted in next fiscal year.
5. Approved payment for partitioning of space in MAG Headquarters Building for use by EMCRO.
6. Approved additional allocation of $500 to meet expenses of AMA meeting in Cincinnati, Ohio.

MAG Legal Counsel: Mr. J. Winston Huff of Powell, Goldstein, Frazer & Murphy was introduced as newly retained MAG legal counsel at a retainer of $7,200 per annum.

GaMPAC Report: Received report that 1,180 physicians were members. Approved expenditure of additional $1,500 funding for GaMPAC educational activities in next fiscal year.

Rochelle Health Access Station: Approved continuation of health access station in Rochelle with transfer of responsibility for station to physicians of Ben Hill-Irwin County Medical Society, if necessary.

Constitution and By-Laws: Approved development of necessary language to enable MAG to remove barriers that now prevent membership for residents and interns in MAG. Also, approved development of language to require payment of dues by physicians employed by civil agencies of government.

Access to Health Care: Endorsed publication of Louis Felder, M.D.'s "A Voluntary Alternative to Massive Health Legislation" in JMAG.

MAG Membership Insurance: Rejected combined Blue Cross-Blue Shield health plan. Directed Committee on Insurance and Economics to make one more attempt to develop plan for presentation to Council in December.

Participating Physician Agreement: Directed the Insurance and Economics Committee to study the new contract between Blue Shield of Columbus and participating physicians with report to Council in December.

Board of Human Resources: Received report from two physician members of Board. Approved continued invitation to Council for all physician members and chairman of the Board.

Headquarters Office Report: A. Mr. Moffett reported on appeal of Fulton County Tax Assessor's appraisal of MAG Headquarters Office Building. B. AMA Management Survey team will conduct study of MAG Headquarters in November.

Constitutional Amendment Number 10: Conditionally endorse Amendment 10 to exclude from payment of ad valorem taxes property used for operation of nonprofit hospitals.

NEW MEMBERS

Abbott, Don C. Richmond—Active—N	1500 Johns Road Augusta, Georgia 30904
Aspell, Robert W. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Blanton, Elisabeth Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Blanton, J. Rodney Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Booth, Arthur S. Atlanta—Active—SU	960 Johnson Ferry Road, N.E. Atlanta, Georgia 30305
Brantley, James W. Wayne—Active—SU	166 Memorial Drive, Box 1133 Jesup, Georgia 31545
Cahn, Bernard J. DeKalb—Active—D	3648 Chamblee-Tucker Road Atlanta, Georgia 30341
Carter, Otha B., Jr. Dougherty—Active—SU	1009 N. Monroe Albany, Georgia 31701
Cornwell, William O. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Cundey, David W. Richmond—Active—C	Medical College of Georgia Augusta, Georgia 30902
Dixon, Gregory Muscogee—A—OR	Medical Center, Box 951 Columbus, Georgia 31902
Elliott, Michael W. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Ellis, William B., Jr. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Field, David E. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Forbis, Samuel E., Jr. Coweta—Active—R	Newnan Hospital Newnan, Georgia 30263
Garrison, Alton F. Richmond—A—SU	Eugene Talmadge Memorial Hospital Augusta, Georgia 30907
Geer, Bruce R. Atlanta—Active—GE	490 Peachtree Street, N.E. Atlanta, Georgia 30308
Geleman, Morris N. Cobb—Active—P	3188 Atlanta Street Smyrna, Georgia 30080
Gilbert, Peter G. Floyd—Active—U	Harbin Clinic Rome, Georgia 30161
Goodwin, Henry N. Richmond—Active—OR	1140 Druid Park Avenue Augusta, Georgia 30904
Griner, Wallace E. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Hagood, Richard M. Cobb—Active—OBG	1676 Mulkey Road Austell, Georgia 30001
Harper, Harry T., III Richmond—Active—C	1467 Harper Street Augusta, Georgia 30902
Hill, Eugene A. Atlanta—A—OBG	Duluth Doctors Building Duluth, Georgia 30136
Hood, Herb L. Dougherty—Active—ANES	417 Third Avenue Albany, Georgia 31705
Hudson, Ronald M. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Hughes, Ronald M. Atlanta—Active—OPH	Emory University Clinic Atlanta, Georgia 30322
Huttenbach, Dirk E. Cobb—Active—P	3188 Atlanta Street, S.E. Smyrna, Georgia 30080
Kimura, Richard Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Lipsius, Lewis H. Atlanta—Active—P	1720 Old Springhouse Lane Atlanta, Georgia 30341
McClure, C. H. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
McCord, James W. Richmond—Active—N	1500 Johns Road Augusta, Georgia 30904
McCrory, Roderick J. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31092
McFarlin, Dale E. Atlanta—A—I	69 Butler Street, S.E. Atlanta, Georgia 30303
Magruder, Richard L., Jr. Richmond—Active—I	1467 Harper Street Augusta, Georgia 30902
May, Stuart T., III Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Miller, Chester O. DeKalb—Active—P	1989 Williamsburg Drive Decatur, Georgia 30033
Morrison, Doyle H. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Mullins, Ross B. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31092
Parmer, Keith M. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31092
Plauth, William H., Jr. Atlanta—Active—PDC	1365 Clifton Road, N.E. Atlanta, Georgia 30307
Scott, James W. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Serrano, Gabriel Ogeechee—Active—FP	107 Liberty Street Claxton, Georgia 30417

Short, Dwight H., II Richmond—A—SU	Medical College of Georgia Augusta, Georgia 30902
Snead, Joseph Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Stapleton, Gerald M. Cobb—Active—OTO	2220 Atlanta Street Smyrna, Georgia 30080
Steele, Robert L. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Swann, Julian W. Atlanta—Active—D	490 Peachtree Street, N.E. Atlanta, Georgia 30308
Todine, Joel D. Floyd—Active—I	Harbin Clinic Rome, Georgia 30161
Trent, Robert M. DeKalb—Active—FP	231 East Ponce de Leon Atlanta, Georgia 30308
Underwood, Frank O. Atlanta—Active—R	1968 Peachtree Road, N.W. Atlanta, Georgia 30309
Van Deventer, Phillip Dougherty—Active—ANES	Phoebe Putney Memorial Hospital Albany, Georgia 31702
Vincent, James L. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Wall, Richard W. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902
Whitfield, Dennis W. Muscogee—A	Medical Center, Box 951 Columbus, Georgia 31902

SOCIETIES

The **DeKalb County Medical Society** has written county, hospital and health officials praising plans by the county to begin sophisticated emergency medical care and ambulance service.

Bartow County Medical Society hosted the September District meeting of doctors and wives at the Allatoona Yacht Club. Included was installation of officers with Richard Griffin of Cartersville as president succeeding David Wells of Dalton.

PERSONALS

First District

Richard S. Bolton has been named health director of the South Central Health District. Laurens County is the district headquarters for the nine-county area he will serve.

Curtis G. Hames, Claxton, has taken the office of president of the Georgia Heart Association, succeeding Harold W. Whiteman, M.D., of Atlanta.

H. Wilder Smith, Swainsboro, attended the Annual Scientific Assembly of the American Academy of Family Physicians in New York City recently, and while there accepted certification as a fellow of A.A.F.P.

Zellnar Young of Savannah is one of nine men named to the board of directors of the Georgia Heart Association. The appointment to a term through 1975 came during the association's annual meeting in Savannah September 15.

Second District

William Potter, Ellaville, has begun medical practice in Camilla.

Third District

Walter W. Simpson and **Wayne G. Hulsey,** in a partnership called Family Practice Associates, have opened offices on Morningside Drive in Perry.

Ronald G. Severs was named chief of staff of Houston County Hospital at the bi-annual meeting of the general medical staff. C. Ray Ivey, Jr., is vice chief of staff; David N. Harvey, secretary; and J. R. Manning and F. M. Lindsey, members-at-large.

Fourth District

Benjamin Okel, Decatur, is one of nine new directors named in September to the board of the Georgia Heart Association.

Fifth District

John S. Atwater has been appointed chief of medicine at Georgia Baptist Hospital in Atlanta.

J. Gordon Barrow, director of the Georgia Regional Medical Program in Atlanta and leader in the Georgia Heart Association, was to speak on "Diagnosis and Treatment of Hypertension" at the 1972 Scientific Sessions for Professional Nurses at the American Heart Association's meeting in Dallas, November 18.

Charles R. Hatcher, Jr., professor of surgery at Emory University of Medicine and chief of thoracic and cardiovascular surgery at Emory University Hospital in Atlanta, has been named president-elect of the Georgia Heart Association.

Mason I. Lowance, Atlanta, has been appointed medical director of the four-state chain of nursing/convalescent centers of Nursecare International, Inc. of Atlanta.

Robert Schlant, Atlanta, was named to the board of directors of the Georgia Heart Association, September 15 and will serve through 1975.

Sixth District

Ben Jenkins, Newnan, has been reappointed to the Medical Examiners Board of Georgia by Governor Jimmy Carter. He has already served eight years on the board.

Hugh K. Sealy has been sworn in as a member of the Macon-Bibb County Hospital Authority for a three year term.

Seventh District

Paul Bradley and **Royal T. Farrow** head a list of physicians working to bring a Medical Arts Building to Dalton. Others involved include Albert Boozer, Paul Henson, James Smith Myers, Jr., Hershel Martin, Ronald Tipton, Carl Gilbert, Frank Houser, Jack Gent, James Gregory and Harvey Wages. There will be seven doctors' suites and a pharmacy in the $1 million structure which is scheduled for completion in late 1973.

Richard M. Klaus, Austell, has been certified to become a diplomate of the American Academy of Orthopaedic Surgeons, after passing boards taken September 21.

Eighth District

R. A. Pumpelly, Jesup, has earned the Physicians

Recognition Award for 1972 from the American Medical Association and has become a diplomate of the American Board of Family Practice.

Ninth District

Elton L. Copelan, Toccoa, has been elected to serve on the Board of Trustees of the American Association of Medical Clinics and is the youngest physician to hold that position. Dr. Copelan was elected to serve a three year term of office at the AAMC annual meeting in Atlanta in September.

Tom Lumsden, Clarkesville, has been named to the board of directors of the Georgia Heart Association and will serve until 1975.

Tenth District

Robert E. Ellison, Augusta, has been named second vice president of the Georgia Heart Association. His election came at the association's annual meeting in Savannah in September.

DEATHS

Curtis Daniel Vinson

Curtis Daniel Vinson, 89, of Macon, retired Atlanta physician, died September 8 in a nursing home after a long illness.

Born in Houston County, Dr. Vinson was a teacher and high school principal who studied medicine while teaching. He received his medical degree in 1922 from Emory University Medical School.

After practicing medicine in Atlanta 39 years, he retired in 1961 and moved to Macon. He was a member of the staff of Lester Maddox while he was governor, was an honorary member of the Fulton County Medical Society, a Mason and veteran of World War II.

Survivors include a son, Joseph C. Vinson of Jacksonville, Fla.; daughters, Mrs. L. F. Bullington of Lizella and Mrs. William E. Fraser of Stone Mountain.

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JOURNAL
OF THE MEDICAL
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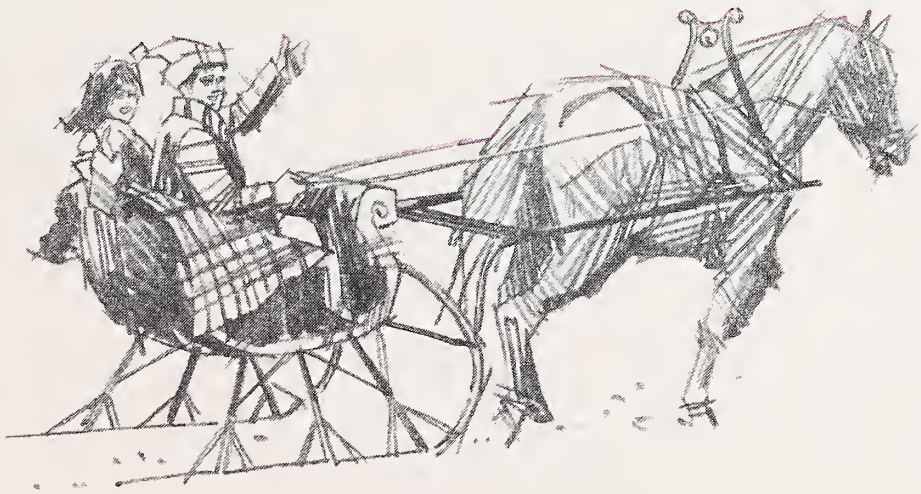
DECEMBER / 1972

Georgia



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DECEMBER 1972 *Volume 61, Number 12*

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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Contents

Special Articles

Scientific Articles

Editorial

Features

The Association

Cover

A happy holiday couple glides through a winterland-white scene framed in holly leaves by Atlanta artist Bob Hamill.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

Medical care may be able to become an institution above and beyond the bureaucrats if doctors are willing to work to make it so.

A Voluntary Alternative to Massive Health Legislation

LOUIS H. FELDER, M.D.,* *Atlanta*

The Medical Association of Georgia House of Delegates in Macon this year approved a resolution which, in essence, states that the doctors of Georgia will voluntarily provide necessary medical care for all the people of the state. The resolution encourages the other 49 state medical societies to do the same. As its author, I have been asked to expound on the conceptualization of this resolution.

At the outset, I presumed most practicing physicians in Georgia put themselves through college, medical school and postgraduate training by their own industry, initiative and private capital, some of which, perhaps, was borrowed. Also, I presumed that most selected their type of practice, practice location, mode of entry into and methodology of private practice. Further, I presumed that if their conduct and competence made their practice successful, they must have been hurt and angry at hearing cries that the medical profession was not performing its function as it should, that the "health care delivery system" was really no system at all and that large segments of the population were going without adequate medical care.

Most practicing physicians do not think of themselves as functioning units in a health care system. They have not been concerned with populations, but with individuals. Until recently, they had given little thought to the existence or absence of health care systems in this country. Now that they have given it some thought I feel most medical practitioners believe the lack of an organized "system" was the very thing that made it possible for patients to develop the relationship with the physician of their choice that would be most beneficial to them.

As sweeping generalizations were made saying the medical profession must take care of the medical needs (or "health care needs") of the people, the practicing physician realized that some individuals and groups had had a change in thinking. That is, those making the generalizations were going on the theory that medical care is a right. I presume that some people truly believe it is; others are simply using the allegation to further their self-seeking ends.

Imminent Legislation

All this would be merely food for interesting conversation except that Congress is now considering legislation on the issue and the Department of Health, Education and Welfare has begun pilot studies using various methodologies for medical care, based on the premise that the profession must provide medical care for all citizens.

Everyone knows that "health care legislation" of various types is pending in Congress. The confusion on the part of the congressmen is evident and they do not know what direction to take. Some of the initial overtures, no doubt, will come out as "bait" to entice physicians and groups of physicians into trying different types of pilot studies for the edification of congressmen. Regardless of the form, some extensive intervention into the practice of medicine by the federal government seems imminent.

The resolution that I proposed to the MAG in

* *Delegate, Medical Association of Georgia, MAA Trustee and Internist.*

Macon was a reasonable alternative to massive health legislation. The resolution is as follows:

WHEREAS, The MAG is acutely aware of the economic unfeasibility of national health insurance to the American taxpayer, and

WHEREAS, The most destructive feature of national health insurance is the loss of autonomy of the patient and the physician in the development of a mutually dependent interpersonal relationship,

Now Therefore Be It Resolved, That MAG immediately publicize through every newspaper in the state, as well as such other media as is feasible, that it will:

(a) Identify the people of this state who do not have access to adequate medical care, and

(b) It will see that they have access to such adequate medical care as they need and will accept.

(c) That MAG will request only such funds from the state and federal government as may actually be needed to implement these functions.

(d) Keep the public continually informed through the news media as to the nature of its efforts, the extent of its successes, the reasons for the temporary obstructions and delays and the cost of its program.

(e) Will encourage every other state medical association to immediately do likewise.

In essence, this resolution states that we, the physicians of Georgia, accept the problem as ours and deal with it accordingly.

I do not know whether this resolution is morally and philosophically justifiable. Is it a concession to group pressure involving the intimate experiences of a patient's relationship with this doctor, that will have adverse ramifications in our concept of freedom?

Opportunity Exists

One thing does seem clear: the opportunity for taking the initiative is there. While we should never lose sight of our moral, philosophical and sociological reservations about the justifiability of the pressure to which we are responding, we should take that initiative. In short, we will either take the initiative voluntarily, and get credit for it, or we will be forced to accept it involuntarily and be viewed by the public as taking the shame for it.

Extensive ramifications stem from the above resolution. Bringing it to the attention of every MD in Georgia is the first step if it is to be implemented. Several goals will have been accomplished if the majority of physicians approve the basic tenets of the proposal:

1. It will establish that doctors of Georgia have made an open-ended commitment to provide the people of the state (or at least make available to them) necessary medical care.

2. It will be obvious to the public, politicians and state and local governments of Georgia that this commitment was spontaneous and credit for making this commitment would go directly to the doctors of Georgia as a group.

3. Medical care will be removed from its role as a political football.

4. The approved proposal will be a tremendous boost in morale for the people of the state who will realize that a group of citizens, perhaps the single-most productive and capable group of citizens in the state, a group capable of performing services with tremendous consequences for the average citizen, is determined to render these services with or without the initial blessing of politicians.

There are few institutions left in this country that do not become grotesquely and dismayingly warped by the politician's consuming need to be re-elected. Medical care can, to a great extent, be an institution above and beyond the bureaucrats if doctors are willing to work to make it so. No other group of people can provide medical care for the people of Georgia except doctors, regardless of the structure under which they function.

We can assume that securing facilities and equipment will not be a very difficult problem. Medical manpower must be carefully arranged, but a satisfactory resolution will be feasible by virtue of our individual and collective commitment.

There are two types of medical manpower: first, MD's; second, other health personnel working under the physicians' direction and supervision. The apparent maldistribution could be alleviated by using both practicing MD's and those just completing internship. Both would be rotated through medically deprived locations for time periods that would be appropriate and nondisruptive.

If you concur that the implementation of this approach is worth considering, please fill out the following questionnaire and return it to MAG Headquarters, 938 Peachtree Street, N.E., Atlanta, Georgia 30309.

478 Peachtree Street, N.E. 30308

Questionnaire

1. Are you philosophically in accord with the premise that the plan proposed is the optimum alternative available to the medical profession at the moment? Yes..... No.....
2. Would you be in favor of house officers spending time in a medically deprived area as a part of their continuing medical education? Yes..... No.....
3. Will you be willing to participate in implementing such a plan even if it should involve the possibility of your going to a medical facility in a deprived area for as long as say one week out of the year? Yes..... No.....
   (This, of course, wouldn't apply to those practitioners who are already in areas where medical manpower is quite scarce. It might, in fact, involve sending them additional help.) The staff and the facilities at a medical care access station would, of course, be permanent; i.e., the staff would be permanently in residence.
   The intention is that these facilities will be operated under the same financial arrangements with which we operate our practices without regard to any contractual agreement that may exist between the patient and any third party.
4. Since perhaps the most important initial overture would be the public announcement through several communications media that the medical profession accepts the challenge and makes the commitment, some of the expense of this announcement might have to be borne by the state medical societies. (This might be recoverable retrospectively, but at least initially, a contribution might be necessary.) Would you be willing to make a tax free voluntary contribution to MAG of $10.00 directed toward defraying the cost of the announcement? Yes..... No.....
   The cost of a special mailing asking for such would be substantial and, of course, hopefully avoidable. To simply write a letter to 4,000 people entails a cost of nearly $1,000. Accordingly, you may wish to send $10.00 now.

As supplementary information to the above, it appears (at least to the author of the article) that there will be no significant legislation pertaining to National health insurance in the United States forthcoming from the present session of the 92nd Congress which ends in December. Any legislation that may come to pass with the next session will have to be cranked up all over again and go through the same channels that it has gone through in the previous two sessions of Congress over the last four years. We, therefore, may well have some running room in point of time. That is to say, it is *not too late to make this project go* but we don't have any time to waste!

AMERICAN COLLEGE OF SURGEONS INDUCTS GEORGIANS AS FELLOWS

In cap and gown ceremonies, 34 Georgia physicians were inducted as new fellows of the American College of Surgeons October 5 during the annual five-day Clinical Congress of the organization in San Francisco, Calif.

A total of 1,527 joined the voluntary scientific and education association of surgeons during the ceremony after fulfilling the comprehensive requirements of education and advanced training.

From Albany are David M. Boyette and W. Ferrell Harper. Atlanta inductees were Edward G. Bowen, David M. Cohen, Roger P. Cook, William H. Fleming, Milton S. Goldman, Eugene O. Harrison, Delutha H. King, Jr., George W. Lucas, Joseph H. Moorhead, Joseph J. Nicholas, R. Lewis Ricks, Steven L. Sanders, George M. Skardasis, William Nisbet Toole, Harvey A. Weiss, John O. Whitehurst, Lovic W. Hobby and Joseph P. Barreca, Jr.

Columbus surgeons are Philip L. Brewer, M. Delmar Edwards and L. Beaty Pemberton; from Decatur, Earl Haltiwanger, Jr.; East Point, Gabriel F. Nassar; Marietta, Goodman B. Espy, III and Julian G. Palmer, Jr.; from Milledgeville, Kamaganahalli M. Sreeramaiah; Rome, James A. Routledge; Savannah, Frank E. Carlton, Herman Delancy, Robert B. Quattlebaum, Jr. and Richard R. Schulze; Toccoa, James C. Pickens.

A Smooth Mass in a Pulmonary Cavity

WILLIAM WHITAKER, M.D. *and* **ELIZABETH HADLEY, M.D.,** *Atlanta**

Dr. William Whitaker: This is the chest film on a 44-year-old female diabetic with a history of treatment for pulmonary tuberculosis in 1967. The patient did well until November, 1971, when she experienced onset of vague abdominal pains, progressive dyspnea and a 13-pound weight loss. Dr. Hadley, would you comment on this chest film (Figure 1)?

Dr. Elizabeth Hadley: This radiograph shows an area of infiltrative process in the left upper lobe with evidence of scarring and contracture. Within the area of infiltration, there is an area of increased density surrounded by an air "halo." There appears to be some further fibrotic changes below this area. The right lung appears normal. This is a straight PA film and you might observe that the trachea is deviated to the left, which indicates scarring and contracture. I do not believe that there are any other abnormalities demonstrated on this chest film. A tomogram may better demonstrate the lesion.

Dr. Whitaker: Tomograms were obtained (Figure 2).

Dr. Hadley: This confirms the findings which can be seen on the plain film. A mass is identified within a cavity.

The patient has had known tuberculosis in the past. The findings here have the characteristic appearance of a fungus ball within a tuberculous cavity. The most common organism known to produce a fungus ball is aspergillus. Perhaps in tuberculosis itself caseous material may accumulate within a cavity and produce this appearance.

I think that neoplasms may produce similar find-

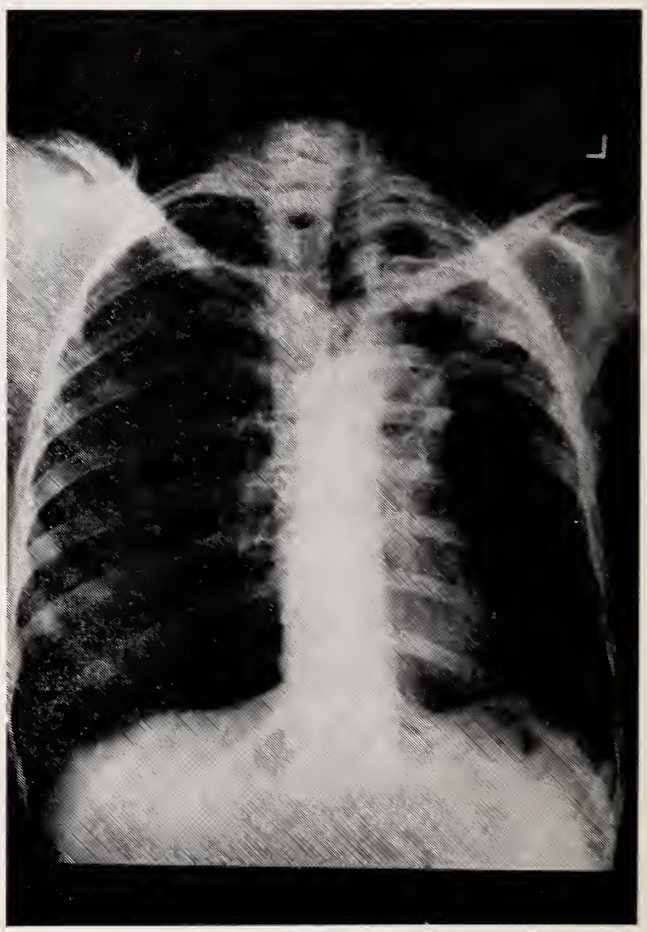


FIGURE 1

Chest radiograph demonstrating a contracting infiltrative lesion in the left upper lobe with a filling defect in a cavity.

* *From a weekly x-ray conference, Department of Radiology, Emory University School of Medicine, Atlanta, Georgia 30322. The conference material has been edited by Doctors J. L. Clements, Jr., and H. S. Weens.*

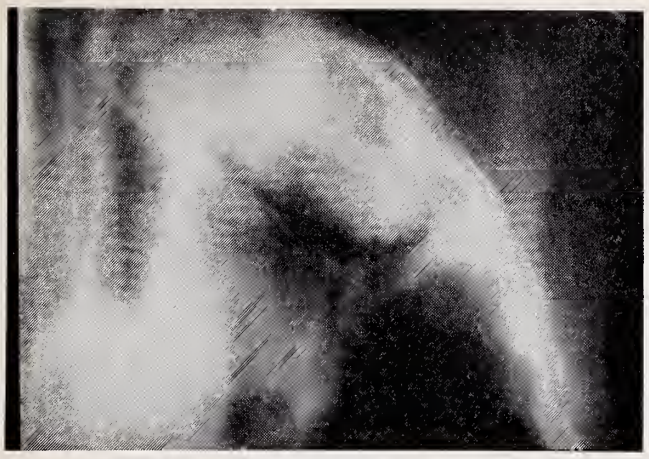


FIGURE 2

Representative tomographic cut demonstrating the filling defect in the pulmonary cavity with a "meniscus" of air around the filling defect.

ings with tumor arising within a cavity and growing to fill the cavity.

Dr. H. S. Weens: In our experience, such large, smooth masses in a cavity are rarely observed in active tuberculosis. Most tuberculous cavities are either empty or contain smaller amounts of fluid or debris.

As you stated statistically, aspergillomas most commonly cause these solid masses within a cavity. Neoplasms form such a mass only very rarely. Occasionally, inspissated material, blood or fibrin clot may have this appearance.

Dr. Hadley: Are there any other organisms rather than aspergillomas that would cause the formation of a fungus ball?

Dr. Weens: Yes, candida, for instance, may do this.

Dr. Whitaker: The patient underwent thoracotomy with resection of the left upper lobe. The gross specimen demonstrates the fungus ball lies in the cavity. Doctor Someren, would you tell us about the histology?

Dr. Aylen Someren: Slides taken from the fungus ball show necrotic material centrally, but there appear to be viable organisms at the periphery of the fungus ball.

Dr. Weens: There is some question whether these fungi are viable in the fungus balls. They are often quite difficult to culture.

Comment

A smooth movable mass in the cavity (sign of pulmonary air meniscus) is most often caused by a fungus ball. Most authors believe that such mycetomas develop in a pre-existing cavity such as a tuberculous or bronchiectatic cavity and are entirely saprophytic in character. Primary neoplasms rarely produce this appearance.

Emory University 30322

REFERENCES

1. Aideen, I.: Radiology of the aspergilloma; *Clin. Rad.* 18:432, 1967.
2. Levin, E. J.: Pulmonary intracavitary fungus ball; *Radiology* 66:9-16, 1956.

AMA BOARD ORDERS CHANGES IN COUNCILS

Motivated by a desire for efficiency, the "infusion of new members and new ideas" and the necessity of meeting restraints of the 1973 fiscal year, the American Medical Association's Board of Trustees has ordered sweeping changes in the structure, operation and numbers of its councils and committees.

Though emphasizing that the changes do not mean certain areas of interest are being abandoned, the Board reduced the size of its councils and committees; reduced the maximum tenure of service on them; directed the councils and committees to reduce the number of their meetings to a minimum and to hold them at the AMA headquarters in Chicago whenever possible, and terminated four councils and six committees.

One change that will affect many AMA members who have received free specialty journals is the decision to make these journals available on subscription basis only in the future.

The Board estimates that savings resulting from its actions will total $840,000 for 1973, which is 2.5 per cent of the AMA's budget.

Before the cutback, AMA had 17 councils and 56 committees with more than 700 members. The new figure is 13 councils, 50 committees and 95 fewer members.

Terminated were the Council on Drugs (12 members); the Council on Occupational Health (10) and its committees on Aerospace Medicine (seven), Occupational Toxicology (six) and Mental Health in Industry (five); the Council on Voluntary Health Agencies (seven) and its Committee on Continuing Professional Education Programs (16); the Council on National Security (11); the Committee on Medicine and Religion (15) and the Committee on Medical Aspects of Automotive Safety (six).

Size of all councils and committees will be reduced by attrition to seven and five members respectively. In the past the size ranged from five to 17.

Instead of the current maximum tenure of service of 10 years for both, the new maximum will be seven years for councils and five years for committees.

A protocol for airway management is presented in order to develop uniformity and excellence within hospitals in regard to this very important aspect of patient care.

Protocol for Airway Management

HOWARD S. BROWN, M.D., L. NEWTON TURK, III, M.D., WILLIAM A. HOPKINS, M.D., KENNETH E. THOMAS, M.D. *and* HILDA CORBIN, R.N., *Atlanta*

THE FIRST TYPE of patient is the individual having a temporary tracheostomy or one usually in place for less than two weeks. These are the patients frequently in Intensive Care Units and who have severe temporary type of respiratory problems, such as experienced in trauma and in whom the tracheostomy will eventually be removed. We feel that it is very important in these people to utilize, what we call, "sterile technique."

I. Equipment
   - A. Clean gloves and non-sterile disposable cups.
   - B. Sterile disposable suction catheters.
   - C. Sterile trays already made up containing rinse basin, gloves and suction catheter.
   - D. Suction source.
   - E. Bottle of sterile saline.
   - F. Disposable 5-10 cc syringes.

II. General considerations
   - A. Sterile technique is to be utilized.
   - B. All suctioning procedures must be fully explained to the patient.
   - C. The frequency of suctioning should be adapted to the patient's needs and timed to coincide with changes of position and deflation of cuff. (Most patients with temporary tracheostomies require suctioning every one to two hours.)
   - D. Artificial humidification is necessary in order to prevent crusting and hardening of secretions. Tracheostomy collars and "T" connectors connected to 40 to 50 per cent oxygen with humidity are appropriate for patients while not being machine ventilated. Patients on mechanical ventilators have the humidity provided for in the nebulizers that are in the mechanical ventilator machine.
   - E. The lumen of suction catheter should not be more than one half of the lumen of the tracheostomy cannula and should be, however, large enough to handle the secretions.
   - F. Brevity in suctioning is of the utmost importance. Never should a patient be suctioned more than 15 seconds without reventilating the patient so that he can be reoxygenated. Many patients do not even tolerate 15 seconds and the idea is to spend as little time with each pass as absolutely necessary.
   - G. When patients are being mechanically ventilated and require inflation of tracheostomy cuffs just inflate the cuffs with enough pressure to seal the leak. Do not routinely force in a predetermined amount of air.
   - H. Tracheostomy cuffs are inflated only to accomplish mechanical ventilation or prevent aspiration. If neither of these factors are involved the cuffs should be deflated.
   - I. Team work approach is to be encouraged whenever possible and as a matter of fact two people are absolutely necessary in order to properly suction patients being mechanically ventilated and to, at the same time, follow sterile technique. Cooperation between the nursing service and the inhalation therapy department is strongly encouraged to accomplish this.
   - J. It is advised to obtain deep tracheal suction specimens for culture and sensitivity at least every other day because of the frequently changing sensitivity of the bacterial flora.
   - K. Cleansing of the tracheostomy site with a bland solution such as zephiran chloride is encouraged at least every four hours with

follow-up application of an ointment effective against pseudomonas and related gram negative organisms such as mycolog. After the ointment is placed a sterile dressing should then follow. Hydrogen peroxide is only to be used as necessary to remove crusts about the tracheostomy stoma.

III. The actual suctioning procedure for temporary tracheostomy patients being mechanically ventilated.
   A. The first thing to do is to suction the nose and throat using a clean glove, sterile disposable suction catheter and clean disposable cup with sterile saline or tap water in the cup to rinse the catheter. After the nose and pharynx are adequately suctioned out, dispose of these previously used materials.
   B. Ventilate for approximately one minute on 100 per cent oxygen. For those patients on mechanical ventilators just turn the oxygen up to 100 per cent.*
   C. Immediately prior to tracheostomy suctioning deflate the tracheostomy cuff. Note, this is ideally accomplished by the second individual, such as an inhalation therapist, while the nurse herself accomplishes the suctioning.
   D. Insert the sterile catheter as far as it will go and suction while removing the catheter from within the tracheostomy. For this purpose, use the already made up sterile container† housing the rinse basin, sterile catheter and glove.
   E. Reconnect to the ventilator, inflate the cuff and ventilate at least one minute on 100 per cent oxygen.
   F. After at least one minute of ventilation with 100 per cent oxygen, turn the patient's head to the left, deflate the cuff, and insert suction catheter as far as it will go down the right mainstem bronchus. As before suction only on the way out and after removal of the catheter from the tracheostomy cannula, quickly reinflate the cuff and attach to ventilator. (Note: If the secretions seem to be too thick to be readily suctioned, insert 5-10 cc sterile saline into the tracheostomy cannula prior to insertion of the suction catheter. The solution present in the rinse basin may be used for this purpose.)
   G. After the patient has been re-ventilated on 100 per cent oxygen for at least one minute turn his head to the opposite direction and repeat procedure above, only going down the opposite mainstem bronchus and suctioning on the way out.
   H. Once again ventilate the patient on 100 per cent oxygen for approximately one minute and then when all suctioning has been completed for this particular episode, turn the inspired oxygen concentration down to the appropriate level on the ventilator. (Note: Two people are absolutely necessary for proper suctioning of patients who have tracheostomies and require continuous ventilation in order to do it properly. In emergency situations, however, make use with what is available and do not worry about breaking rules but only under absolute emergency situations.)

IV. Procedure for suctioning temporary tracheostomies or endotracheal tubes in patients not requiring continuous ventilation.
   A. Inflate the cuff and ventilate for at least one minute with Ambu bag or similar apparatus connected to oxygen running 8 to 10 liters per minute prior to the actual suctioning.
   B. Deflate the cuff and proceed with suctioning as listed under the procedure for temporary trach patients requiring continuous ventilation.
   C. The remainder of the suctioning procedure is exactly like that listed under temporary trach patients requiring continuous ventilation except for substitution of Ambu or similar apparatus for presuction ventilation rather than turning the ventilator up to 100 per cent before and between each suction episode. I will emphasize that when patients are not being ventilated and are not aspirating the tracheostomy cuff should be deflated.

Clean Technique

The second major category of patients is the one with a permanent tracheostomy or arbitrarily one placed longer than two weeks. These are seen frequently in chronic obstructive lung disease patients and in those patients with chronic neurological problems who are not in Intensive Care Units and are either managed at home or in a hospital room on the main floor. We do not feel that absolute sterile technique is necessary in these individuals but do emphasize a basic clean technique be utilized in their management.

** We particularly feel that preventilation with 100 per cent oxygen is important in order to have a satisfactory circulating oxygen supply and thereby minimize cardiac arrest which are sometimes seen when patient's airways are suctioned.*

† These are available already made up by several manufacturers in sterile disposable kits.

I. Equipment
   A. Clean gloves and cups of disposable nature.
   B. Sterile disposable suction catheters.*
   C. A suction source.
   D. Bottle of sterile saline or tap water.
   E. Disposable 5-10 cc syringes.

II. General considerations
   A. In contrast to the temporary tracheostomies, a basically clean technique is used rather than the sterile technique.
   B. All suctioning procedures must be fully explained to the patient.
   C. The frequency of suctioning should be adapted to the patient's needs and timed to coincide with changes in position and postural drainage, if postural drainage is being done. Most patients with permanent tracheostomies require suctioning at least every two to three hours if unable to effectively clear their tracheostomy cannulas by coughing. Some of them learn to cough and if they can do this and evacuate their secretions they should be encouraged to do so.
   D. Artificial humidification is usually necessary and best applied with a tracheostomy collar connected to a source of oxygen and humidity. It is not the oxygen that is important here but rather the humidity to keep the secretions from crusting and getting hard.†
   E. The lumen of suction catheter should not exceed one half diameter of the tracheostomy cannula.
   F. Brevity is encouraged with 15 seconds being absolutely the maximum for each suctioning episode. (Suctioning episodes means thrust of catheter into trachea.)
   G. The frequency of obtaining tracheal secretions for culture and sensitivity will vary greatly with the individual patient.
   H. The tracheostomy site should be cleaned at least once daily with a bland solution such as zephiran, followed by an antipseudomonas ointment such as mycolog.

III. The procedure for the actual suctioning.
   A. Run a high flow of oxygen into the trach cannula prior to the suctioning for at least one minute to adequately oxygenate the patient.
   B. Using the clean gloves, clean cup and sterile catheter insert the catheter into the tracheostomy and suction while removing it. Be brief, as mentioned before.
   C. Allow the patient to recover between each suctioning episode and run high flow oxygen into the tracheostomy cannula.
   D. Alternately introduce the catheter into each mainstem bronchus by turning the head to the appropriate side and then suction on withdrawal.
   E. Discontinue suctioning when patient seems to be clear of his secretions. If the secretions seem to be too thick to evacuate by suctioning alone, irrigate the cannula with 5-10 cc of sterile saline or tap water.

Naso-tracheal Suctioning

The third major category of patient is the individual not having a tracheostomy but for whom naso-tracheal suctioning is indicated as part of his hospital or home management. This would apply to patients with medical pulmonary problems and immediate postoperative patients having had either thoracic or abdominal surgery.

I. Equipment
   The same as listed above for the permanent tracheostomy except it will not be necessary to have any gauze dressing for a tracheostomy.

II. General considerations
   A. Follow listings under permanent tracheostomies except for omitting D, E, and H.

III. Actual suctioning procedure
   A. Allow one minute of nasal oxygen to run in approximately 8 to 10 liters per minute.
   B. The patient should be sitting up as much as possible and he should thrust his tongue forward.
   C. Either the patient or an assistant should grasp the tongue with a gauze square and hold it forward during the suctioning procedure.
   D. Using the clean gloves, sterile catheter and clean cups with either sterile saline or tap water in the cup, insert the suction catheter through the external nares and down into the pharynx. With the patient leaning forward, neck extended and tongue held out, introduce the catheter into the trachea with patient taking deep breaths. Once the cannula is in the trachea, gently push it down and then suction, moving it back.
   E. Do not remove the catheter completely from

** We feel that disposable catheters are the best despite the fact that clean technique, rather than sterile technique, is the basic management of this category of patients. We have repeatedly cultured the lumens of catheters which have been reused for an individual patient and have found ready growth of pathologic bacteria despite various types of bactericidal soakings and irrigations. For this reason we believe that catheters should be disposed of after each use or, as a second best alternative, completely resterilized before being used again. The resterilization will have to be by appropriate autoclave methods, however, and not by routine bactericidal soaking techniques.*

† Cold steam humidifiers appropriately placed will suffice for patients managed at home.

the trachea but allow the patient to rest between each episode of suctioning. In other words, the catheter may be left in the trachea and the patient encouraged to breathe around it and allowed to recover between each actual suctioning episode. When the patient has recovered, introduce the catheter a little further down into the trachea and then suction on the way back. Once again do not remove the catheter completely from the trachea. Allow the patient to recover and then turn his head to one side and introduce the catheter down the opposite main bronchus and then suction on the way back into the trachea. Turn the head to the opposite side and repeat the same maneuver down the opposite bronchus.

F. Allow the patient to breathe oxygen 8 to 10 liters per minute via nasal cannula between each of the suction thrusts.

G. Remove cannula from the trachea when patient is clear of secretions or sooner if patient obviously does not tolerate the suctioning procedure.

Note: The above protocol is at the moment current and in the future may be varied accordingly, as better materials become available, and basic concepts are changed. This is a basic protocol for the use of nursing staff and related hospital personnel and may be modified only by direct order of a patient's physician.

1175 Peachtree Street, N.E. 30309

REFERENCES

1. Bendixen, H. H., Egbert, L. D., Hedley-Whyte, J., Laver, M. B. and Pontoppidan, H.: *Respiratory Care;* St. Louis, The C. V. Mosby Company, 1965.
2. Safar, Peter, Editor: *Respiratory Therapy;* Philadelphia, F. A. Davis Company, 1965.

MAG PERSONNEL CHANGES

The Medical Association of Georgia announces three additions to its staff, filling the positions of executive secretary of the Georgia Medical Care Foundation, legislative representative and *Journal* managing editor.

Coming from San Francisco, Calif., Mr. Gustav (Gus) Anderson, 42, brings to the Foundation in depth experience in the field of health benefit administration. Prior to joining the Foundation, he was a consultant for the Federal Regional Health Maintenance Organization office and acted in a similar capacity for a number of insurance carriers and large self-insured groups.

A former vice president of Pacific National Life Assurance Company and Republic National Life Insurance Company, Mr. Anderson has worked closely with most California Foundations for Medical Care.

The new executive secretary was born in Pennsylvania and was graduated from Northwestern University. He served four years as a Naval reconnaissance photographer and was in public information during the Korean Conflict.

Mr. Anderson is a 32 degree Mason and Shriner and enjoys hunting and backpacking. The Anderson family includes the former Isabel Marcantoni of San Juan and their two children, Ingrid, 5, and Jonathan, 2.

The task of communicating MAG's concerns to the Georgia Legislature will be handled by Rusty Kidd, 26, whose familiarity with state government comes in part from his father, Senator Edwards Culver Kidd, Jr.

Mr. Kidd is a Milledgeville native who majored in finance at the University of Tennessee for which he played football and basketball. He has served as loan officer and public relations representative for a Pensacola, Fla. bank and was in the automobile business in Sandersville, Ga.

Mr. Kidd will be in touch with medical societies and auxiliaries around the state, informing them of MAG's activities in the legislature and letting individuals know how they can be of help.

New managing editor of the *Journal* is Kathy Morse, 24, who comes to MAG after working two years as a reporter and editor for a suburban Atlanta daily newspaper.

Born in Ft. Knox, Ky., her Army family lived in Alabama, New York, Italy and Japan before moving to Florida. Miss Morse received her journalism degree from the University of Florida.

Expanded staff now includes (L-R) Rusty Kidd, Kathy Morse and Gus Anderson.

Primary responsibility for rehabilitation is placed on the insurance carrier with understanding and cooperation from the attending physician.

Georgia's Trial Program of Rehabilitation

TOM S. HOWELL, JR., M.D.,* *Atlanta*

THE NATIONAL COMMISSION of Workmen's Compensation, appointed by President Nixon, met in Atlanta on January 10, 1972. One of the main topics of discussion was "Rehabilitation." The Commission felt strongly that any seriously injured workman, physically unable to return to his previous activity, deserved the dignity of returning to gainful employment rather than being dependent on "welfare." The Commission's report was submitted to President Nixon on July 31, 1972 and recommended that "each workmen's compensation agency establish a medical rehabilitation division, with the authority to effectively supervise medical care and rehabilitation services."

The State of Georgia had no definite program of rehabilitation under Workmen's Compensation; however, a committee was appointed to study our state's needs and to make recommendations. The committee members consisted of representatives from the Workmen's Compensation Board, Insurance Industry, Medical Association and Division of Rehabilitation Services. The Committee's first obstacle was the definition of "rehabilitation." The physician usually considers this term in relationship to therapy designed to restore functional ability. The Insurance Industry and Rehabilitation Services think primarily of "job retraining." A combination of both views, for the overall welfare of the individual, is desirable. The program will attempt to utilize funds from Workmen's Compensation Insurance and from Rehabilitation Services in an effort to achieve maximum benefits for the injured worker.

Beginning in July, 1972 a "trial program" has been put into effect in Georgia. This plan would place the primary responsibility for rehabilitation on the insurance carrier; however, understanding and cooperation from the attending physician is necessary. Within 90 days of an injury the insurance carrier is required to furnish information to the Board of Workmen's Compensation and to the Office of Rehabilitation Services on any injury meeting the following criteria:

1. The attending physician indicates that rehabilitation will be necessary.
2. Injury of severity which may likely prevent a return to previous employment.
3. Injury in which disability is expected to exceed 26 weeks.
4. Injury in which prolonged or unusual medical treatment is anticipated.

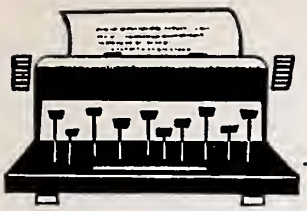
The Office of Rehabilitation Services has 30 days in which to investigate this case and to furnish the Workmen's Compensation Board and the insurance carrier with information regarding the desirability and feasibility of rehabilitation. Depending on these findings, and with the knowledge and consent of the attending physician, appropriate rehabilitation attempts will be implemented.

The physicians primary responsibility begins with the "initial report of injury." The report has a section (No. 22) which relates to rehabilitation; unfortunately this segment is often left incomplete. The physician will need to educate office personnel as to the importance of completing this information. He, also, will need to exercise "patience" during this trial period. Many of the insurance carriers have hired rehabilitation nurses and, at present, few of the carriers are completely oriented as to details. Physicians will probably receive unnecessary telephone calls and may be asked to give additional medical reports. The advisory committee will meet at quarterly intervals and any physician wishing to express an opinion will be welcome.

Hopefully, there will be cooperation between all segments in this attempt; the ultimate beneficiary will be the patient.

* *Chairman of the Occupational Health Committee, Medical Association of Georgia.*

620 Peachtree Street, N.E. 30308



EDITORIAL

Christmas . . . a Universal Season

THE FESTIVAL of "Christ's Mass" or "Christmas" . . . as we know the word today . . . was first instituted in Rome by the year 336 and from there it spread throughout the churches of the East and West. The purpose of the festival was to celebrate the Incarnation or birth of Jesus Christ. Though the precise moment of the birth of Jesus of Nazareth is nowhere recorded, December 25 was chosen to commemorate that event in order to substitute a Christian festival for a very popular pagan celebration . . . the "Birth of the Sun-god" . . . which took place on that very date. The Emperor Constantine, the first Roman emperor to become a Christian convert, probably had a hand in the establishment of this Christian celebration since it happened during his reign, and he is known to have made every effort to substitute Christianity for the pagan religions of his empire.

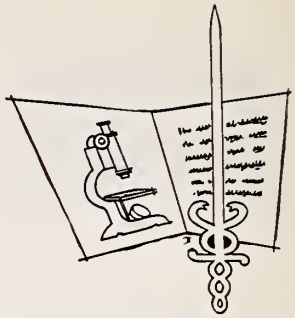
Whatever the exact details of the beginning of the Christian celebration, however, it is clear that as it spread, it met the needs of many people throughout the world whether Christian or not. It did so because it put an emphasis on joy and thanksgiving, on family togetherness, on peace and good will among men, and on the rebirth of hope for the future of the world. Since the world has known but a few hours of actual peace in its entire existence, such aspirations and longings have always captured the hearts, minds, and spirits of men. Thus, today Christmas is not only one of the major celebrations of the Christian Church . . . it is a celebration which is shared and enjoyed by millions of people who have no commitment to Christianity at all.

Christmas is a time . . . when the scattered members of families gather together in order to be close to those they love; . . . when houses, as well as stores and streets, are festooned with colorful decorations; . . . when trees are brought into homes, meeting some primordial need within us to be close to nature; . . . when special foods are prepared with loving hands, shared at a common table and washed down with delightful beverages.

Christmas is a season . . . when gifts are exchanged between friends and special gifts are given to younger children by Santa Claus; . . . when neighbors are invited into our homes, and relationships with close friends are renewed; . . . when cards of greeting . . . sometimes with personal notes . . . are exchanged to affirm old friendships in the midst of the very busy rush of life; . . . when carols and folk music get down inside of us and tell us of new possibilities for our lives and for the life of this world.

Thus, Christmas is a kind of universal season of rejoicing quite apart from its specifically religious significance and often provides an opportunity for many warm, rich, and varied human experiences. Thanks be to God!

Thomas D. Bowers
Rector
St. Luke's Episcopal Church
Atlanta



CHEMOTHERAPY OF CARCINOMA OF THE BREAST

CHARLES M. HUGULEY, JR., M.D.,* *Atlanta*

CARCINOMA OF THE BREAST is one of the more sensitive of the solid tumors to chemotherapeutic agents. Recent therapeutic results strongly suggest that a really effective chemotherapeutic regimen may be available within the next few years.

According to the review by Livingston and Carter[1] the effectiveness of single agents in carcinoma of the breast is as follows:

Drug	*Responses/No. of Patients*	*Percentage Response Rate*
Methotrexate	87/259	33.6
Cyclophosphamide (Cytoxan®)	52/165	31.5
5-Fluorouracil	306/1207	25.4
Melphalan (Alkeran®)	20/86	23
Vinblastine (Velban®)	19/95	20
Vincristine (Oncovin®)	32/164	19.5
Prednisone	33	18.5

The above data refer only to responses; that is, at least a 50 per cent shrinkage of tumors. The complete response rate is much smaller.

Cooper[2] has reported that a five-drug regimen utilizing cyclophosphamide, 5-fluorouracil, vincristine, methotrexate and prednisone gave a complete remission rate of 85 per cent. While the experience of others would indicate this is somewhat too optimistic a figure, there is no question but that complete remissions are produced by combination chemotherapy in a large proportion of patients with metastatic breast cancer.

Progress in chemotherapy of acute leukemia and Hodgkin's disease occurred in two stages. First came the development of drugs which, when given alone, produced complete remissions in a significant percentage of patients. Secondly, these drugs were continued choosing those with different modes of action and with different target organs of toxicity so that almost full dosage of each drug was tolerated. The use of such combinations has tremendously advanced our therapy for these diseases.

Perhaps we are nearing this point with breast cancer. We do not have as many agents available which produce a significant percentage of responses as we had available for acute leukemia and Hodgkin's disease nor has the percent response rate and completeness of response been as good. Nevertheless, we do have a series of drugs with respectable response rates and in combination these are more likely to produce good remissions. There is considerable activity throughout the country at the moment in the trial of various combinations of drugs given in varying schedules hoping to improve the response rate and decrease the toxicity. The original Cooper regimen was administered for only 8 weeks because it is so toxic that it is

* *Medical Vice President, American Cancer Society, Georgia Division, Inc.*

hard to maintain it longer than that. Experience with other diseases suggests that a cyclic regimen with short rest periods may permit patients to tolerate larger doses for a longer time.

Unfortunately, the complete remissions induced by combination therapy usually do not last very many months. Indeed, when a single agent does produce a response it is likely to last as long as that produced by the multiple agents. Experience with other diseases would indicate that a longer duration of treatment may be necessary.

Earlier Attack

Once we have identified a really effective combination which can be used in full dosage for 6 months or longer, we should be in position to attack cancer of the breast at an earlier stage. Chemotherapy is most effective when the total amount of tumor in the body is at its lowest. This time is obviously in the postoperative period. About 80 per cent of premenopausal women who are found to have four or more positive nodes at the time of radical mastectomy will be dead in 5 years. Trials of adjuvant chemotherapy should concentrate on a high risk group like this. With one exception previous attempts at adjuvant therapy have been disappointing. The National Surgical Adjuvant Breast Project has been able to demonstrate that premenopausal women with four or more nodes positive at the time of surgery, have a longer disease-free interval and a greater five year survival if treated with a single course of Thio-TEPA postoperatively.[3]

We now know such a therapeutic regimen is inadequate. Intensive therapy with a combination of drugs maintained at least 6 months can be expected to do considerably more. However, we should first determine which combination is most effective in advanced mammary cancer. It is difficult to consider offering untested treatment to a group of younger women without evidence of disease when one considers the sometimes disabling toxicity and the universal severe discomfort that accompanies combination chemotherapy. This reluctance to put women on a very toxic schedule for at least 6 months when its value in advanced disease has not been proven has led the National Surgical Adjuvant Breast Project to devise a surgical adjuvant program which utilizes melphalan (Alkeran®) given intensively over a two-year period. Hopefully, this is going to be effective but it is highly unlikely that the effectiveness will be nearly that which might be obtained with a combination drug approach.

In the meantime, large numbers of patients treated on controlled protocols will be necessary to give us some of the answers posed in the above discussion.

1365 Clifton Road, N.E. 30322

REFERENCES

1. Livingston, R. B. and Carter, S. C.: Single agents in cancer chemotherapy; *IFI/Plenum*, New York, 1970.
2. Cooper, R. G.: *Proc. Am. Assoc. Cancer Res.* 10:57, 1969.
3. Fisher, B., Ravdin, R. G., Ausman, R. K., Slack, N. H., Moore, G. E. and Noer, R. J.: Surgical adjuvant chemotherapy in cancer of the breast; *Ann. Surg.* 168:337, 1968.

PITFALLS IN INVESTING IN REAL ESTATE SYNDICATIONS

WALTER G. MOELING, IV,* ***Atlanta***

IN RECENT YEARS, the growth of the real estate syndication as an investment medium has been very significant. For a variety of reasons, doctors have been frequent participants in syndications of both raw land and developed property. Too often, investments in such syndications have been made on the basis of inadequate, misleading and inaccurate information.

Stated simply, a real estate syndication is a device whereby the funds of several investors (usually partners, limited partners, joint venturers or co-tenants) are invested in the purchase of a single piece of developed or undeveloped real estate. The syndicate is usually sponsored by a promoter, who may be a real estate agent or a property owner or the representative of the owner of the property to be syndicated. The credibility, competency and honesty of the promoter is of utmost importance. Any investor should make certain he is not being led on by extravagant tales of financial success such as those which filter regularly through the investment (and medical) community.

Physicians, as a profession, are the natural targets of many promoters of real estate syndications. In fact, some estate syndications have been put together simply by a random mailing of promotional literature to physicians listed in the yellow pages. This article will survey many of the problems, dangers and pitfalls which confront an investor in real estate syndications and will offer suggestions which may be of help in evaluating any given syndication.

The legal form in which the syndicate is being organized is the first important area. Generally, syndicates are structured as either general or limited partnerships, joint ventures (which in legal effect are substantially the same as general partnerships) or co-tenancies.

In a general partnership or joint venture situation, all of the investors are treated as partners and are equally liable for the debts of the syndicate. Where the syndicate has invested in raw land, these debts usually begin and end with the purchase mortgage on the property. If the property is to be developed, then the risk of personal liability is of course much greater. If the form of syndication is that of a limited partnership, the liability of a limited partner is limited to the amount he expressly agrees to contribute to the limited partnership.

Use Caution

Some promoters structure their syndicates in the form of "co-tenancies," which means that the investors are not partners, but merely common owners of the prop-

* *Prepared at the request of The Medical Association of Georgia. Mr. Moeling is an associate in the firm of Powell, Goldstein, Frazer & Murphy, General Counsel to the Association.*

erty. This practice is legally suspect and may lead to unforeseen consequences. For example, many co-tenancy agreements have express provisions that the co-tenants are not partners. The danger here is that the Internal Revenue Service will agree that the co-tenants are not partners but will contend that the co-tenants have formed an association taxable as a corporation. In this event, none of the tax benefits (such as interest deduction or, in the case of developed property, depreciation) would be passed through to the investors and a double tax (both at the corporate and at the shareholder level) would have to be paid when the property is sold. Another very real danger is that the courts would find that a partnership exists in fact, and would hold that the "co-tenants" are therefore liable for all the debts and liabilities of the syndicate. The risks involved in structuring a transaction in this manner in most cases outweigh the alleged benefits. Accordingly, investment in a "co-tenancy" situation should be approached with caution.

If the chosen form of the syndicate is a limited partnership, the investor must be certain that the limited partnership complies with the Internal Revenue Service Regulations. This is particularly true where the general partner is a corporation. The risk, again, is that the limited partnership may be taxed as a corporation and none of the tax benefits will be passed through to the individual investor.

In addition to considering the personal liability and tax problems outlined above, the investor must also look carefully to the provisions of the syndication agreement. In particular, many of these agreements contain provisions obligating the investor to make additional contributions. These provisions are often open-ended, and may contain extremely harsh provisions, such as forfeiture, for failure to make these additional contributions. Also, many agreements contain provisions exculpating the promoter from any liability, and permitting extensive self-dealing. The investor should review these provisions with care and should insure that adequate safeguards are contained in these and other areas of the agreement.

Regardless of the form chosen for the syndicate, real estate syndications can (and often do) involve the issuance of "securities" as that term is used in both the federal and Georgia securities laws. Notwithstanding statements to the contrary in some promotional literature, general and limited partnership interests, joint venture interests, and co-tenancy interests usually constitute "securities" and thus the sale of these interests is subject to federal and state regulation in the same manner as the sale of stocks and bonds. If the syndication is subject to the securities laws and if the promoter fails to comply, the investor may generally require the promoter to refund his investment within a specified period.

Investigate Carefully

The thrust of both the state and federal securities laws is to disclose information material to the transaction and to prohibit misleading statements and representations. The investor should investigate the status of any syndicate very carefully, and should seek advice if the promoter claims the securities laws are not applicable. A possible safeguard here would be an opinion of counsel that the promoter's claims are accurate. As professionals, doctors should appreciate the dangers inherent in relying on a layman's claim as opposed to a professional opinion.

Even beyond the strictly legal problems that have been mentioned, there are other dangers which confront the potential investor. Without attempting to name all of the possible points of inquiry, several of them should always be considered by a potential investor.

Close inquiry should be made concerning the compensation or fees of the promoter. Promoter's fees can and do vary greatly and they may be taken in many different forms. For example, a promoter may buy the real estate himself at one price and then re-sell the property to the syndicate at a higher price; he may cause the syndicate to purchase the property from a related entity at an increased price; or he may charge dual commissions, both on the purchase and on the eventual sale of the real estate. This latter point is particularly important where, under the syndi-

cation agreement, the promoter is able to control the re-sale of the property. In addition, promoters of developed property frequently charge management fees for managing the property and rental fees for renting the property. Finally, many promoters may retain a percentage interest in the syndicate in exchange for their services, in addition to some or all of the other forms of compensation. The promoter is of course entitled to a reasonable fee for his services, but the wise investor should investigate the amount of the fee and the extent and nature of any self-dealing or dealing with related entities. If the promoter's fee and other forms of compensation are unreasonably high, the investors' return may be severely limited.

Reasonable Prices

Another area which should be closely scrutinized is the promoter's description of the property and its alleged value. Some brochures are quite vague as to the location of the property and its availability to highways and utilities. Claims that the property was purchased at less than fair value or that it will produce an unusually high rate of return should be suspect. The investor should also verify claims of imminent construction of new roads, sewers and water mains.

As a matter of fact, some real estate syndicates are now holding property which was purchased at such a high price that it cannot be developed profitably. Many parcels of property near metropolitan areas have already changed hands two or three times in recent years, frequently at unrealistically high prices.

Comparable real estate sales in the area of the property to be syndicated can sometimes be guides to reasonable prices for the property being offered. However, comparable sales cannot be reasonable guides unless they are confirmed as being the actual prices per acre, unless the terms of the comparable sale are also considered, and unless the properties involved are actually "comparable." For example, a purchase price of $1,000 per acre in cash is not comparable to a purchase price of $1,000 per acre which is payable, for example, interest only for ten years with the balance then payable in subsequent installments. The promotional literature should include the terms on which the comparable properties were sold, and should note other differences such as access to transportation and utilities, timber potential, current use, zoning, etc.

With respect to developed property, the alleged tax benefits should be carefully scrutinized by the investor and his personal tax advisor. If a major basis for the investment in the property is a tax benefit, the investor should require an opinion of the promoter's counsel that the tax benefits that are claimed are really available.

There are many potential pitfalls in participating in a real estate syndication. Accordingly, discretion and caution should be used. This does not mean that real estate syndications should be avoided. Many syndications offer excellent investment and tax shelter opportunities for doctors. However care must be taken to identify the legitimate promoter and the legitimate project.

This article does not purport to cover all the aspects of real estate syndication. The physician should consult his advisors as to any particular investment.

Eleventh Floor
C & S National Bank Building 30308

NEW MEMBERS

Alexander, James H. Active—MAA—Pd	280 Hilderbrand Ave., N.E. Atlanta, Georgia 30328
Bronstein, Edwin S. Active—Richmond—OBG	Medical College of Georgia Augusta, Georgia 30902
Estes, J. W. Active—MAA—VS	353 Parkway Dr., N. E. Atlanta, Georgia 30312
Gedney, Leigh M. Service—MAA—U	B18, Fed. Annex Atlanta, Georgia 30304
Grablowsky, Oscar M. Active—MAA—Su	340 Boulevard, N. E. Atlanta, Georgia 30312
Greer, Bruce R. Active—MAA—GE	490 Peachtree St., N. E. Atlanta, Georgia 30308
Hagan, John C., III Associate—MAA—OPH	Emory University Atlanta, Georgia 30322
Jones, Ellis L. Associate—MAA—TS	Emory University School of Medicine Atlanta, Georgia 30322
Joseph, A. Harold Active—MAA—U	3316 Piedmont Rd., N. E. Atlanta, Georgia 30305
Levy, Moreno Y. Life—MAA—FP	4649 S. Ashland Atlanta, Georgia 30309
McKinney, Ray L. Active—Dougherty—R	417 Fourth Ave. Albany, Georgia 31705
Mokal, Albert J. Active—MAA—R	35 Linden Ave., N. E. Atlanta, Georgia 30309
Patton, Maurice G. Active—Richmond—PH	1001 Bailie Dr. Augusta, Georgia 30902
Rabb, Forte C. Active—Hall—D	327 Northside Dr., N. W. Gainesville, Georgia 30501
Sanders, Conrad W., Jr. Active—Richmond—Su	Medical College of Georgia Augusta, Georgia 30902
Summers, Gerald R. Active—Richmond—R	1415 Gwinnett St. Augusta, Georgia 30902
Tyler, Richard M. Active—MAA—Or	75 Piedmont Ave., N. E. Atlanta, Georgia 30303
Wingate, Hubert W. Active—Dougherty—N	711 N. Monroe St. Albany, Georgia 31701

SOCIETIES

The **Medical Association of Atlanta** is soliciting nominations for its Aven Cup, an annual award to the physician making the most outstanding contribution in the field of community service. More than 100 metropolitan Atlanta civic clubs and health and welfare organizations have been asked to submit nominations by Jan. 1, 1973 with announcement of the winner at a February banquet.

The **DeKalb Medical Society** is undertaking a campaign with the county chamber of commerce to interest young physicians in locating a permanent practice there. Posters are being distributed to medical colleges and hospitals throughout the United States and ads are being placed in medical journals.

Praise from the **Georgia Medical Society** has gone to Maj. Everett E. Price, chief inspector for the Bureau of Drug Abuse Control for efforts toward curbing that problem in the city.

PERSONALS

First District

Irving Victor, Savannah, representing the Georgia Medical Society, is serving on a board to set up and administer a proposed Chatham-operated emergency medical services (EMS).

A. J. Yates, Jr. of Soperton received the degree of Fellow from the American Academy of Family Physicians at its inaugural ceremony Sept. 26 in New York City.

Fourth District

V. H. Bennett, 86, of Gay was honored with a catfish supper on an October afternoon by a group of 100 friends who presented him with a green reclining chair. He said he will enjoy it when he retires but has announced no plans to end his practice which began 61 years ago.

Sixth District

John A. Bell, Jr. and **Fred J. Coleman** of Dublin have been awarded the degree of Fellow by the American Academy of Family Physicians at the inaugural ceremony Sept. 26 in New York City.

Eighth District

Russell A. Acree of Hahira and **James C. Dismuke, Jr.,** of Adel have been named Fellows of the American Academy of Family Physicians.

Ninth District

Robert Pauly is now associated with the Toccoa Clinic group working with **J. Wade Knowlton** and **Robert Slate** in the Department of Surgery. He is a Luxemburg native who grew up in the Congo and received his medical education at the University of Lausanne in Switzerland. His internship and surgical training were in the United States and he has com-

pleted service as a medical officer in the U.S. Navy. Dr. Pauly is Board Eligible in general surgery.

Tenth District

Robert G. Ellison of Augusta has been appointed Governor for the American College of Surgeons. **Luther H. Wolff** of Columbus also serves as Governor for the Georgia Chapter of A.C.S.

DEATHS

James Hubert Milford

James Hubert Milford, Sr., 53, a general practitioner in Hartwell 27 years, died October 26 of leukemia in Emory University Hospital.

Born in Hart County, Dr. Milford was graduated from Emory University and the Medical College of Georgia. He interned at Georgia Baptist Hospital and served as a captain with the U.S. Medical Corps during World War II.

Dr. Milford was past president of the Georgia Academy of Family Physicians, past chairman of the State Medical Education board, former director of the Hart County Chamber of Commerce and was Hart County Medical Examiner.

Additional professional memberships included the American Medical Association, American Academy of Family Physicians and Elbert, Franklin and Hart Medical Association.

Survivors include his widow, Mrs. Charlotte Mills Milford; sons, James Hubert Milford, Jr. of New York, N.Y. and Jon David Milford of Atlanta.

Eli Alvin Rosen

Eli Alvin Rosen, 58, died October 22 in Dalton following a heart attack.

He was born in Brooklyn, N.Y. and received his education at the University of West Virginia, the University of West Virginia Medical College and University of Virginia Medical College. During World War II he served in the U.S. Army Medical Corps.

Active in professional and civic organizations, Dr. Rosen was a member of the American Medical Association, Academy of Family Physicians, past president of the medical staff of Hamilton Memorial Hospital, past president of Whitfield-Murray Medical Society.

Dr. Rosen was member of the Board of Georgia Arthritis Foundation, Junior Achievement and the Committee of United Appeal and was past president of Temple Beth-El.

Survivors include his widow, Mrs. Bernice C. Rosen; sons, Dr. Barrett Rosen of Louisville, Ky., Robert Rosen of Washington, D.C. and Gary Rosen of New York, N.Y.; mother, Mrs. Jennie Rosen; and brother, Fred W. Rosen of New York City; sister, Mrs. Helene Alisberg of West Hartford, Conn.

THE MONTH IN WASHINGTON

Only a handful of some 2,600 health related bills introduced into the 92nd Congress have become public law. The most talked about pieces of health legislation over the past two years—national health insurance and health maintenance organizations—have been set aside for deliberation by next year's 93rd Congress.

After long years of debate by two sessions of the Congress, the Social Security catch-all legislation (H.R. 1) with its significant amendments to Medicare and Medicaid gained passage and has been signed into law by the President. Three of its measures are of major importance to physicians.

First is the Professional Standards Review Organization (PSRO) proposal of Utah's Senator Wallace Bennett which is designed to improve quality and utilization review of health care on a national basis. This provision of the law stresses that over the next two years peer review will be concentrated in institutional settings rather than in physicians' offices, such review to be undertaken by physician organizations only.

Second, the new law stipulates that Medicare and Medicaid patients may receive care from health maintenance organizations (HMO's) but that federal reimbursement for such care will be no greater than for similar services rendered by non-HMO providers.

Third, the new law grants certain chiropractic benefits to Medicare and Medicaid patients. As passed by the Senate, chiropractic benefits were limited only to manipulation of the spine. In joint conference, House members further modified the Senate provision to require that chiropractic benefits be covered only after an x-ray revealed subluxation. The language of the law is not specific, but apparently the x-ray cost will not be paid for by Medicare, nor may the x-ray be interpreted by a chiropractor. However, this point will not be clarified until the regulations are written. The provision also requires that chiropractors, in order to be reimbursed, must meet minimum standards established by the Secretary, Department of Health, Education and Welfare.

Peer Review

Under the peer review provision of the new law, local medical societies will have the opportunity to establish peer review mechanisms, operating independently, to review the quality of care hospitals and nursing homes provide to Medicare and Medicaid patients.

Task of the PSRO is to "assure proper utilization of care and services . . . utilizing a formal professional mechanism representing the broadest possible cross-section of practicing physicians in an area."

The HEW Department could reach agreement only "with a qualified organization which represents a substantial proportion of the physicians in the geographical area. . . ." If this isn't achieved by 1976, HEW could turn to some other group to establish the PSRO.

A PSRO would be required to review only institutional care and services through 1975 unless it chooses —with approval of the government—to broaden the scope to include private practice.

During the pre-1976 period, 10 per cent or more of the practicing physicians in an area could demand a poll of all practicing physicians to determine whether the organization negotiating to set up a PSRO substantially represents the physicians of the area. A more than 50 per cent "no" vote would break off the negotiations.

From now until the end of next year, the HEW Department is ordered to establish PSRO areas around the country (usually 300 or more physicians). In some cases it is believed that entire smaller states will be designated as PSRO areas.

In carrying out its responsibilities the PSRO would be required to regularly review provider and practitioner profiles of care and service (that is, the patterns of services delivered to Medicare and Medicaid beneficiaries by individual health care practitioners and institutions) and other data to evaluate the necessity, quality, and appropriateness of services for which payment may be made under the Medicare and Medicaid programs.

The PSRO would be expected to analyze the pattern of services rendered or ordered by individual practitioners and providers and to concentrate its attention on situations in which unnecessary, substandard, or inappropriate services seem most likely to exist or occur.

A PSRO would have authority to approve the medical necessity of all elective hospital admissions in advance—solely for the purpose of determining whether Medicare and Medicaid will pay for the care. The PSRO would also be required to acknowledge and accept, in whole or in part, an individual hospital's own review of admissions and need for continued care, on a hospital-by-hospital basis, where it has determined that a hospital's "in-house" review is effective. It is expected that where such "in-house" review is effective this authority would be exercised by the PSRO. Similarly, a PSRO would be required to acknowledge and accept for its purposes, review activities of other medical facilities and organizations, including those internal review activities of comprehensive prepaid group practice programs such as the Kaiser Health Plans and the Health Insurance Plan (HIP) in New York to the extent such review activities are effective.

The PSRO would (after reasonable notice) recommend to HEW appropriate action against persons responsible for gross or continued overuse of services, for use of services in an unnecessarily costly manner, or for inadequate quality of services and would act to the extent of its authority and influence to correct improper activities.

Where a review organization finds that voluntary and educational efforts fail to correct or remedy an improper situation, it would transmit its recommendations concerning sanctions through a statewide council to the secretary of HEW.

The secretary could terminate or suspend Medicare and Medicaid payments for the services of the practitioner or provider involved, or assess an amount reasonably related to the excessive costs to the programs deriving from the acts or conduct involved.

A PSRO would have the responsibility of determining—for purposes of eligibility for Medicare and Medicaid reimbursement—whether care and services provided were: first, medically necessary, and second, provided in accordance with professional standards. Additionally, the PSRO where medically appropriate, would encourage the attending physician to utilize less costly alternative sites and modes of treatment.

The PSRO would not be involved with questions concerning the reasonableness of charges or costs or methods of payment nor would it be concerned with internal questions relating to matters of managerial efficiency in hospitals or nursing homes except to the extent that such questions substantially affect patterns of utilization. The PSRO's responsibilities are confined to evaluating the appropriateness of medical determinations so that Medicare and Medicaid payments will be made only for medically necessary services which are provided in accordance with professional standards of care.

The local PSRO would be primarily responsible for review of all Medicare and Medicaid services rendered or ordered by physicians in its area. The purpose of the provision is to establish a unified review mechanism for all health care services under the aegis of the principal element in the health care equation, the physician.

HMO Option

The legislation contains the Administration's request for allowing Medicare-Medicaid beneficiaries to enroll in HMO's, but limits the choice to existing pre-paid group practicing plans by providing that incentive reimbursement would be available only to HMO's with a minimum membership of 25,000 and which have been in operation for at least two years. Instead of the Administration's plan for paying such HMO's 95 per cent of the combined part A and part B costs of Medicare patients in an area, the bill sets out a formula under which HMO's would receive one-half of the savings if care has been rendered for less than the Medicare average in an area (the so-called incentive reimbursement), but would have to absorb the entire loss if HMO treatment for Medicare beneficiaries runs higher than regular Medicare costs in the area.

The Joint Conference rejected a provision that would have made the federal government share in the losses of HMO care to Medicare patients, as well as a provision that would have established a bonus arrangement for states providing HMO care for Medicare beneficiaries.

Chiropractic

Inclusion of chiropractic benefits for the first time in a federal program was a setback for the medical profession, the Administration, and numerous other anti-chiropractic forces. However, the modification of the chiropractic benefit language in conference may make it practically unworkable. As passed by the Senate, chiropractic benefits were limited to manual manipulation of the spine. In conference, this was modified to require that benefits would be covered only after an x-ray revealed subluxation. Apparently the x-ray cost will not be covered, nor can it be interpreted by a chiropractor, but these points will not be clarified until regulations are written.

Senator Edward Kennedy attempted by an amendment from the floor to strike the chiropractic provision, but it was soundly defeated by a vote of 66 to 6. Subsequently, the Massachusetts senator admonished the AMA for not supporting his amendment.

However laudable his effort, Senator Kennedy—an experienced parliamentarian—should have recognized that his attempt to strike the chiropractic provision had

no chance of success. His amendment to H.R. 1 was unprinted; he introduced it from the Senate floor; and he proceeded without the cooperation of the bill's floor manager. That his approach was ill-advised from the standpoint of effective parliamentary procedure is evidenced by the amendment's lopsided defeat.

Prior to the introduction of his amendment, the Senator's staff was counseled by anti-chiropractic forces—including the AMA—that he did not have the votes. Further, it was pointed out that an overwhelming defeat of his amendment by a recorded vote would seriously hamper the Senate conferees in their efforts to bargain with members of the House in joint conference.

On several occasions in the past, the Senate Finance Committee has added a similar chiropractic provision to a pending measure. But in each of these cases the Senate conferees later agreed to its deletion in joint conference with the House. In large part this was made possible because the chiropractic issue had not been singled out for separate vote on the Senate floor, and thus did not specifically pin down the Senate conferees.

In the latest instance, Senator Kennedy raised the issue singly and separately. Predictably, his amendment was roundly defeated.

Unfortunately, the effect of this was to impress the Senate conferees with the recorded wishes of the vast majority of their colleagues when they sat in joint conference with the representatives of the House. In conference, however, Rep. Wilbur Mills was able to modify the Senate language so as to require an x-ray determination of subluxation.

Other Provisions

1. Renal disease—individuals under the age of 65, covered by social security, would be eligible for Medicare if they require hemodialysis or renal transplantation. This is the second instance in the bill of extending Medicare to younger-than-65-people.

2. Abusers—providers determined to have overused Medicare could have their services under the program terminated under stronger powers granted the HEW Department against abusers.

3. Black lung—eliminated was a Senate provision that would have extended Medicare coverage to people receiving "black lung" benefits under social security.

4. Publicity—adopted is a requirement that HEW Department make public information from a survey of health facilities or organizations on the absence or presence of "significant deficiencies." Also the government must make public evaluations and reports dealing with individual contractor performances of carriers, intermediaries and staff agencies as well as program validation survey reports with names of individuals deleted.

5. Joint Commission—HEW could enter into agreements to have states survey a hospital or hospitals certified by the Joint Commission on Accreditation of Hospitals on a limited basis where an allegation has been made that adverse health conditions exist.

6. Eyeglasses, etc.—rejected was a senate provision adding Medicare part B benefits for poor families the costs of eyeglasses, podiatric services, dentures and hearing aids.

Left intact in the measure is a limitation on physicians' prevailing charge levels under Medicare. Recognized as reasonable are only those charges which fall within the 75th percentile (a charge that covers 75 per cent of the existing case charges for a procedure or treatment in an area excluding the top 25 per cent of charges), a step that Social Security already has carried out administratively. Starting next year, under the bill, future charge increases would be limited by a factor which takes into account increased costs of practice and the increase in earning levels in an area.

Stricken from the bill was a $900 million provision to add drugs as an outpatient Medicare benefit, as well as a plan that would have established an Inspector General over Medicaid and Medicare in the HEW Department.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF COUNCIL
November 12, 1972

AMA Leadership Conference: Recommended appropriation to send president, president-elect, secretary, chairman of communications committee and executive director to Chicago, Feb. 16-18, 1973 for national meeting on setting of priorities by organized medicine.

Appointments to FDA Panels: Recommended submission through AMA to FDA—C. S. Glisson, M.D., Atlanta and A. E. Hendee, M.D., Atlanta, OB-GYN, for panel on vaginal preparations and Beverly Sanders, M.D., Macon, Dermatology, for panel on anti-perspirants.

Public Relations: Recommended hiring public relations employee for MAG.

GMCF Report: (1) Approved continued investigation of establishment of HMO by a physician group. (2) Authorized continued search for financial support to implement Felder resolution. (3) Instructed staff to seek from HEW developmental funds for establishing PSRO's by medical societies in the state.

EMCRO Report: (1) Approved investigation of funding for health statistics system. (2) Authorized establishing ad hoc committee on geriatric medicine. (3) Recommended sharing of data with Georgia State University as long as anonymity and prior approval of use of data are included in agreement.

Expansion of Office Space: Granted discretionary authority to executive director on utilization of upper and lower lobby as office space in MAG Headquarters Building.

Marion Memorial Hospital: Received report on complaint of hospital authority against a staff physician. Approved accepting original jurisdiction from Sumter County Medical Society and referred to MAG Professional Conduct and Medical Ethics Committee.

HMO Legislation: Approved use of basic guidelines on minimal requirements for HMO's with no implication of MAG endorsement for HMO legislation.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

Index
Volume 61—1972

Month	Pages	Month	Pages	Month	Pages
January	1-36	May	153-182	September	307-342
February	37-66	June	183-262	October	343-366
March	67-124	July	263-280	November	367-390
April	125-152	August	281-306	December	391-410

Key to letter abbreviations appearing before page numbers:

C—Cancer Page
E—Editorial
H—Heart Page
L—Legal Page

AUTHOR'S INDEX

SUBJECT INDEX

—A—

—B—

Index to Advertising

VOL. 61 DECEMBER 1972 NO. 12

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MANUSCRIPTS—Articles are accepted for publication on the condition that they are contributed solely in this *Journal*. Manuscripts should be typewritten, double-spaced, and the *original and one copy should be submitted*. Receipt of manuscripts will be acknowledged and unused manuscripts returned. Used manuscripts will be returned only if requested.

STYLE—Ordinarily articles should not exceed 3,000 words. Only under exceptional circumstances will articles of over 4,000 words be published. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association—i.e., name of author, title of article, name of periodicals (underlined) with volume, page, month, day of month if weekly, and the year. They should be listed in alphabetical order and numbered in sequence. Example: 1. Jones, S. R.: Spontaneous Epistaxis; *Arch. Int. Med.*, 36:434 (Dec.) 1946.

NEWS NOTES—District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

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